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Commissioner	:	<u>L. Randolph</u>
ALJ	:	<u>R. Lirag</u>
Witness	:	<u>D. Phan</u>



OFFICE OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

**Report on the Results of Operations
for
San Diego Gas & Electric Company
Southern California Gas Company
Test Year 2019
General Rate Case**

**SoCalGas – Gas Distribution
and Gas Control & System Operations/Planning**

San Francisco, California
April 13, 2018

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1 **SoCALGAS – GAS DISTRIBUTION AND GAS CONTROL & SYSTEM**
2 **OPERATIONS/PLANNING**

3 **I. INTRODUCTION**

4 This exhibit presents the analyses and recommendations of the Office of
5 Ratepayer Advocates (ORA) regarding the Gas Distribution proposals of Southern
6 California Gas Company (SCG or SoCalGas) in its Test Year (TY) 2019 General
7 Rate Case (GRC). Specifically, ORA addresses SoCalGas’ forecasts of Gas
8 Distribution operation and maintenance (O&M) expenses for 2019 and capital
9 expenditures for 2017 through 2019.

10 Gas Distribution O&M expenses are for work activities such as leakage
11 surveys, leak repairs, application of corrosion control measures, valve maintenance,
12 monitoring meter accuracy, odorant, and locating and marking buried pipes to avoid
13 damage caused from digging by others. Gas Distribution capital expenditures
14 include plant investments to replace, repair, and protect SoCalGas’ gas distribution
15 system and to construct new gas distribution facilities. Capital expenditures for new
16 business include investments to install gas infrastructure required to connect new
17 customers to the existing system, and to accommodate existing customers’ demand
18 for increased load requirements.

19 Gas Control and System Operations/Planning O&M expenses are for work
20 activities that support system utility operations and emergency response. The work
21 activities of this group provide support for the following departments: (1) Storage
22 Products Manager, (2) Energy Markets & Capacity Products-Director, Manager and
23 Support, (3) Gas Scheduling, (4) Gas Transmission Planning, (5) Gas Control &
24 SCADA Operations, and (6) SoCalGas Emergency Services.

25

1 **II. SUMMARY OF RECOMMENDATIONS**

2 **A. Gas Distribution Expenses**

3 The following summarizes ORA's recommendations regarding Gas
4 Distribution O&M expenses:

5 **1. Non-Shared**

- 6 • ORA recommends a total of \$118.037 million in Gas Distribution
7 O&M non-shared expenses for 2019. ORA's recommendation is
8 \$29.842 million lower than SCG's forecast of \$147.879 million.

9 **2. Shared**

- 10 • ORA does not take issue with SCG's request of \$275,000 for
11 Shared O&M expenses.

12 A comparison of SCG's and ORA's recommendations for Gas Distribution
13 O&M Non-Shared and Shared expenses are presented in the table below.

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Table 11-1
Gas Distribution O&M Expenses for 2019
(in Thousands of 2016 Dollars)

Description (a)	SCG 2016 Recorded	ORA Recommended (b)	SCG Proposed ¹ (c)	Amount SCG>ORA (d=c-b)
Non-Shared				
Field Operations & Maintenance	\$98,667	\$101,233	\$129,116	\$27,883
Asset Management	\$8,171	\$6,965	\$6,965	\$0
Operations Mgmt. & Training	\$5,645	\$5,419	\$7,378	\$1,959
Regional Public Affairs	\$3,460	\$4,420	\$4,420	\$0
Total Non-Shared	\$115,943	\$118,037	\$147,879	\$29,842
Shared				
Operations Leadership & Support	\$689	\$275	\$275	\$0
Total Shared	\$689	\$275	\$275	\$0
TOTAL O&M	\$116,632	\$118,312	\$148,154	\$29,842

Source: SCG's 2016 recorded and 2019 forecast from Ex. SCG-04-R, p. GOM-1.

¹ Ex. SCG-04, p. GOM-30, Table GOM-10 (non-shared) and Ex. SCG-04, p. GOM-87, Table GOM-32 (shared).

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B. Gas Distribution Capital Expenditures

The following summarizes ORA’s recommendations regarding Gas

Distribution capital expenditures:

- ORA recommends adopting the 2017 adjusted-recorded expenditures of \$279.210 million, as its 2017 forecast for Gas Distribution Capital Expenditures. ORA’s recommendation is \$737,000 higher than SCG’s forecast for 2017.
- For 2018, ORA recommends \$274.586 million for Gas Distribution capital expenditures, compared to SCG’s \$324.801 million request.
- For 2019, ORA recommends \$298.167 million for Gas Distribution capital expenditures, compared to SCG’s \$347.842 million request.
- ORA’s recommendations are lower than SCG’s 2018 and 2019 requests due to differences in forecasting methods and SCG’s lack of adequate support for some of its requests.

1 Table 11-2 compares ORA's and SoCalGas' 2017-2019 capital expenditure
 2 forecasts:

3 **Table 11-2**
 4 **Gas Distribution Capital Expenditures for 2017-2019**
 5 **(in Thousands of Dollars)**

Description	ORA Recommended			SoCalGas Proposed ²		
	2017	2018	2019	2017	2018	2019
New Business	\$43,342	\$37,212	\$47,904	\$36,632	\$45,313	\$50,393
Pressure Betterment	\$24,241	\$23,088	\$23,088	\$23,088	\$23,088	\$23,088
Supply Line Repl.	\$1,833	\$4,209	\$4,209	\$4,209	\$4,209	\$4,209
Main Replacements	\$35,738	\$33,711	\$33,711	\$33,711	\$33,711	\$33,711
Service Replacements	\$35,205	\$31,871	\$31,871	\$28,538	\$31,470	\$34,403
Main & Service Abandonments	\$9,312	\$8,988	\$8,988	\$9,256	\$10,522	\$11,787
Regulator Stations	\$6,427	\$7,531	\$7,531	\$8,636	\$14,636	\$19,436
Cathodic Protection	\$8,264	\$6,059	\$8,322	\$6,320	\$8,434	\$9,511
Pipeline Relocations – Freeway	\$1,402	\$3,745	\$3,745	\$7,837	\$7,837	\$7,837
Pipeline Relocations – Franchise	\$13,200	\$16,891	\$16,891	\$17,894	\$17,894	\$17,894
Other Dist. Capital Proj & Meter Guards	\$5,704	\$3,297	\$3,297	\$3,656	\$11,596	\$11,596
Measurement & Regulation Devices	\$18,370	\$29,547	\$37,037	\$22,266	\$29,547	\$37,037
Capital Tools	\$9,510	\$10,688	\$9,588	\$14,386	\$14,220	\$12,322
Field Capital Support	\$65,384	\$57,749	\$61,985	\$61,317	\$70,292	\$74,618
Remote Meter Read	\$1,278	\$0	\$0	\$727	\$2,032	\$0
Total	\$279,210	\$274,586	\$298,167	\$278,473	\$324,801	\$347,842

6 **C. Gas Control & System Operations/Planning Expenses**

7 The following summarizes ORA's recommendations regarding Gas Control &
 8 System Operations/Planning O&M expenses:

9 **1. Non-Shared**

- 10 • ORA recommends \$1.301 million in Non-Shared Expenses for
 11 2019. This amount is \$1.671 million lower than SCG's request of
 12 \$2.972 million.

² Ex. SCG-04, p. GOM-91, Table GOM-34.

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2. Shared

- ORA does not dispute SCG’s request of \$5.986 million in Shared expenses for 2019.

Table 11-3 compares ORA’s and SoCalGas’ 2019 Gas Control and System Operations/Planning expense forecasts:

**Table 11-3
Gas Control & System Operations/Planning O&M Expenses for 2019
(in Thousands of 2016 Dollars)**

Description (a)	SCG 2016 Recorded	ORA Recommended (b)	SCG Proposed ³ (c)	Amount SCG>ORA (d=c-b)
Non-Shared				
Storage Products Manager	\$146	\$156	\$156	\$0
Emergency Services	\$640	\$1,145	\$2,816	\$1,671
Total Non-Shared	\$786	\$1,301	\$2,972	\$1,671
Shared				
Energy Mkts & Capacity Products	\$1,553	\$1,550	\$1,550	\$0
Gas Scheduling	\$600	\$724	\$724	\$0
Gas Transmission Planning	\$607	\$691	\$691	\$0
Gas Control & SCADA Operation	\$2,481	\$3,021	\$3,021	\$0
Total Shared	\$5,241	\$5,986	\$5,986	\$0
Total O&M	\$6,207	\$7,287	\$8,958	\$1,671

³ Ex. SCG-13, p. DKZ-14, Table DKZ-8 (non-shared) and Ex. SCG-13, p. DKZ-2, Table DKZ-3 (shared).

1 **PART I: FORECASTING METHODOLOGY**

2 SCG uses a variety of methods to forecast its Gas Distribution O&M
3 expenses and capital expenditures. These methods include the five-year (2012-
4 2016) average, the Last Recorded Year (2016 or LRY), zero-based method, or the
5 five-year (2012-2016) linear trend. The method most used by SCG is the five-year
6 linear trend. To develop its forecasts, SCG establishes a base amount using one of
7 these methods, and to this base, SCG adds incremental increases it claims are
8 necessary in the Test Year period.

9 ORA reviewed all of SCG’s O&M and capital requests. ORA does not take
10 issue with several of SCG’s requests. For some areas, however, ORA disagrees
11 with SCG’s method and recommends alternatives. ORA oppose SCG’s use of the
12 linear trend to forecast expenses for several work categories. In these instances,
13 ORA recommends using the LRY, or the two-year (2016 and 2017) average, or the
14 five-year average when these methods are more appropriate.

15 ORA relies on the following CPUC decisions as precedent and guidance on
16 which methodology would be the most appropriate to use in determining the Test
17 Year forecast for Gas Distribution O&M expenses, capital expenditures, and Gas
18 Control and System Operations/Planning expenses :

19 D.15-11-021, the Commission states the following:

20 *“...LRY[Last Recorded Year] should be used when recorded figures have*
21 *been stable or trending in a certain direction for three or more years whereas*
22 *averaging is used for accounts with “significant fluctuations in recorded*
23 *expenses from year to year.”^{4,5}*

24

⁴ D.89-12-057 at 15.

⁵ D.15-11-021, at 210.

1 In this same decision, the Commission also states the following:

2 *“According to D.89-12-057, itemized expenses may be added if*
3 *they are “specific changes in the level of expenses in a particular*
4 *account, which are known or reasonably expected to occur.”⁶*

5 D.89-12-057, the Commission states the following regarding estimating
6 expenses for 1990 expenses with 1987 as the base year or last recorded:

7 *1. If recorded expenses in an account have been relatively stable*
8 *for three or more years, the 1987 recorded expenses is an*
9 *appropriate base estimate for 1990.*

10 *2. If recorded expenses in an account have shown a trend in a*
11 *certain direction over three or more years, the 1987 level is the*
12 *most recent point in the trend and is an appropriate base estimate*
13 *for 1990.*

14 *3. For those accounts which have significant fluctuations in*
15 *recorded expenses from year to year, or which are influenced by*
16 *weather or other external forces beyond the control of the utility,*
17 *an average of recorded expenses over a period of time (typically*
18 *four years) is a reasonable base expense for 1990.”*

19 ORA uses SCG’s 2017 recorded expenses in developing the Gas Distribution
20 O&M expenses and capital expenditures, and Gas Control and System
21 Operations/Planning expenses. The SCG 2017 capital expenditures data comes
22 from Exhibit ORA-01, Attachment 1. The SCG 2017 O&M expense data comes from
23 Exhibit ORA-01, Attachment 2.

24 All amounts expressed in this testimony are in constant 2016 dollars unless
25 otherwise noted.

⁶ D.15-11-021, at 211.

PART II: NON-SHARED GAS DISTRIBUTION O&M EXPENSES

I. FIELD OPERATIONS AND MAINTENANCE

Field Operations and Maintenance is one of four categories of management wherein costs incurred for the operations and maintenance of SCG's 52 operating bases located throughout the utility's service territory are tracked.⁷

The activities and costs under Field Operations and Maintenance include the following workgroups: (1) Locate and Mark, (2) Leak Survey, (3) Meter and Regulators (M&R), (4) Cathodic Protection, (5) Main Maintenance, (6) Service and Maintenance, (7) Field Service, and (8) Tools, Fittings, and Materials.

The table below provides the SCG 2012-2016 recorded annual costs and the ORA and SCG 2019 forecasts of these workgroups.

**Table 11-4
Field Operations and Maintenance Expenses
2012-2016 Recorded and 2019 Forecast
(in Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
1. Locate and Mark	\$11,329	\$11,790	\$12,352	\$13,165	\$13,628	\$16,050	\$14,284
2. Leak Survey	\$5,982	\$6,704	\$8,000	\$7,172	\$7,080	\$10,711	\$8,874
3. Measure & Reg.	\$11,839	\$12,438	\$12,895	\$13,329	\$13,831	\$14,888	\$13,150
4. Cathodic Protection	\$9,659	\$10,442	\$12,232	\$12,640	\$14,403	\$18,322	\$14,300
5. Main Maintenance	\$13,302	\$9,773	\$16,103	\$13,008	\$11,383	\$20,772	\$10,139
6. Service Maint.	\$10,133	\$7,514	\$11,613	\$11,379	\$10,339	\$16,997	\$11,390
7. Field Support	\$21,545	\$20,791	\$21,247	\$19,916	\$19,402	\$21,069	\$19,821
8. Tools Fittings & Materials	\$8,218	\$8,068	\$8,426	\$9,157	\$8,601	\$10,307	\$9,275
Total	\$92,007	\$87,520	\$102,868	\$99,766	\$98,667	\$129,116	\$101,233

Source: 2012-2016 data from Ex. SCG-04-WP, p. 7- 109. SCG 2019 forecasts from Ex. SCG-04-R, p. GOM-30, Table GOM-11.

⁷ Ex. SCG-04-R, p. GOM-31.

1 **A. Locate and Mark**

2 SCG requests \$16.1 million, an increase of \$2.4 million above the 2016
3 recorded spending amount of \$13.6 million, for work activities under Locate and
4 Mark.⁸ As an owner of underground facilities, SCG is mandated by Title 49 of the
5 Code of Federal Regulations and California’s “One-Call” statute—California
6 Government Code § 4216 to identify and mark utility-owned substructures at
7 locations of planned excavations.⁹ According to SCG, the utility’s Locate and Mark
8 program meets these requirements by locating and marking its underground
9 pipeline, conducting job observations, performing pothole operations, and
10 performing depth checks.¹⁰

11 The SCG 2012-2016 recorded expenses for the work activities under Locate
12 and Mark are presented in the table below. This table also provides a side by side
13 comparison of SCG’s and ORA’s 2019 forecasts.

14 **Table 11-7**
15 **Locate and Mark Expenses**
16 **2012-2016 Recorded and 2019 Forecast**
17 **(in Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Locate and Mark	\$11,329	\$11,790	\$12,352	\$13,165	\$13,628	\$16,049	\$14,284

18 Source: Ex. SCG-04-R-WP, p. 7.

19 **1. Overview of SCG’s Request**

20 For TY2019, SCG requests \$16.049 million for Locate and Mark, an increase
21 of \$2.422 million above the recorded 2016 expenses of \$13.628 million.¹¹ SCG
22 claims that the changes in federal, state, and local regulations and requirements

⁸ Ex. SCG-04-R, p. GOM-31.
⁹ Ex. SCG-04-R, p. GOM-31.
¹⁰ Ex. SCG-04-R, p. GOM-32.
¹¹ Ex. SCG-04-R, p. GOM-31.

1 increase the number of tickets, size of work area, and time on premise.¹² SCG
2 claims an increase in general construction activity in public and private rights-of-way
3 and customer growth as a result of economic growth also contributes to the rise in
4 O&M expenses in the test year.¹³

5 SCG's 2019 forecast is based on a linear trend using the five-year (2012-
6 2016) recorded expenses.¹⁴ The SCG linear trend produces an increase of \$1.811
7 million above the 2016 recorded expenses. SCG also requests the following
8 additional increases above the 2016 recorded amount: (1) \$111,000 for USA ticket
9 price increase, and (2) \$500,000 for adding vacuum technology to its existing
10 excavation methods. The total increase above the 2016 recorded expenses is
11 \$2.422 million, for a forecast of \$16.049 million in 2019.

12 **2. ORA's Analysis**

13 ORA recommends \$14.284 million, an increase of \$656,000, above the 2016
14 recorded amount of \$13.628 million. ORA's recommendation is \$1.766 million lower
15 than SCG's request of \$16.049 million for 2019. ORA's forecast is based on
16 applying a different method to determine the base amount. ORA does not take
17 issue with SCG's request of \$111,000 for USA ticket price increase and \$500,000 to
18 increase its capacity to locate and mark accurately using keyhole technology. ORA's
19 recommendation is comparable to recent historical spending for Locate and Mark.

20 **a. Base Amount**

21 SCG's trending method results in an increase of \$1.811 million above the
22 2016 recorded amount. ORA disputes SCG's use of trending to determine the base
23 amount because the use of the LRY is more appropriate. ORA's method results in a
24 base amount of \$13.673 million.

25 According to the many Commission decisions regarding the principles of
26 forecast methodologies, such as decisions D.89-12-057 and D.15-11-021 excerpted

¹² SCG-04-R, p. GOM-34.

¹³ Id.

¹⁴ Id.

1 in Section I above, if recorded expenses in an account have shown a trend in a
2 certain direction over three or more years, the LRY is an appropriate base estimate.
3 The recorded expenses show a steady upward trend from 2014 to 2016, as shown
4 in the table above.

5 The LRY SCG identifies in testimony is 2016. However, SCG recently
6 provided the 2017 recorded expenses for O&M activities. The 2017 recorded for
7 Locate and Mark is \$13.718 million. ORA recommends using the two-year average
8 of 2016 and 2017 recorded expenses as the base amount for its 2019 forecast. This
9 method would be in line with Commission guidance, and would also reflect the most
10 recent expenses for Locate and Mark work. The ORA recommended amount using
11 the two-year average of 2016 and 2017 expenses is \$13.673 million. The ORA
12 forecast is \$1.766 million lower than SCG's proposed base amount of \$15.439
13 million.

14 **b. USA Ticket Price Increase**

15 SCG requests an additional increase of \$111,000 over the 2016 level due to
16 an increase in membership fees based on an increase in tickets driven by the new
17 requirements in the Dig Safe Act of 2016.¹⁵ ORA does not dispute this SCG
18 request.

19 **c. Vacuum Technology for Potholing**

20 SCG requests an additional \$500,000 over the base forecast to increase the
21 utility's capacity to locate and mark hard-to-find or un-locatable pipelines using
22 keyhole technology.¹⁶ ORA does not dispute this SCG request.

23 **B. Leak Survey**

24 The work activities under the Leak Survey category are to meet federal and
25 state pipeline safety regulations. Federal Code 49 C.F.R. §192.723 and General
26 Order 112-F require SCG to survey its gas distribution system for leakage.¹⁷

¹⁵ Ex. SCG-04-R, p. GOM-35.

¹⁶ Id.

1 According to SCG, the utility performs routine and special leak surveys as a
 2 mitigation measure against risks associated with hazards to public and employee
 3 safety, infrastructure integrity, and system reliability.¹⁸ Routine leak surveys are
 4 performed at intervals of one, three, or five years, depending on the pipe material,
 5 operating pressure, whether the pipe is under cathodic protection, and the proximity
 6 of the pipe to various population densities.¹⁹ Special leak surveys are performed as
 7 needed and on more frequent cycles such as two, three, or six months.²⁰

8 The SCG 2012-2016 recorded expenses and 2019 forecast is provided in the
 9 table below. Also included is ORA's 2019 forecast for comparison purposes.

10 **Table 11-8**
 11 **Leak Survey Expenses**
 12 **2012-2016 Recorded and 2019 Forecast**
 13 **(in Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Leak Survey	\$5,982	\$6,704	\$8,000	\$7,172	\$7,080	\$10,711	\$8,874

14 Source: Ex. SCG-04-R, WP, p. 22.

15 **1. Overview of SCG's Request**

16 For 2019, SCG requests an increase in \$3.631 million above the 2016
 17 recorded amount of \$7.080 million to perform the work activities under Leak Survey.
 18 SCG's forecast is based on the following: (1) a linear trend of the 2012-2016
 19 historical spending, which results in an increase of \$1.240 million, and (2) additional
 20 costs of \$1.690 million to perform bi-annual high-pressure leak surveys, and
 21 enhanced leak survey of early vintage plastic pipe (Aldyl-A), plus a credit of
 22 \$334,000 for FOF net benefit savings.²¹

(continued from previous page)

¹⁷ Ex. SCG-04-R, p. GOM-36.

¹⁸ Ex. SCG-04-R, p. GOM-38.

¹⁹ Ex. SCG-04-R, p. GOM-36.

²⁰ Ex. SCG-04-R, p. GOM-37.

²¹ Ex. SCG-04-R, pp. GOM-38 to GOM-39.

1 **2. ORA’s Analysis**

2 ORA recommends \$8.874 million for Leak Survey for 2019, an increase of
3 \$104,000, above the 2016 recorded amount. ORA’s recommendation is \$1.837
4 million lower than SCG’s request of \$10.711 million for 2019. ORA’s forecast is
5 based on using a different method to determine the base amount, recommending
6 zero funding for additional surveys of high-pressure pipes, and \$1.690 million for
7 pre-1986 Aldyl-A pipes.

8 **a. Base Amount**

9 SCG’s method of trending results in an increase of \$1.240 million above the
10 base year amount. ORA disputes SCG’s method and recommends using the LRY
11 expense as the base amount.

12 According to the many Commission decisions regarding the principles of
13 forecast methodologies, such as decisions D.89-12-057 and D.15-11-021, if
14 recorded expenses in an account have shown a trend in a certain direction over
15 three or more years, the LRY is an appropriate base estimate. The recorded
16 expenses show a steady downward trend from 2014 to 2016, as shown in the table
17 above.

18 The LRY SCG identifies in testimony is 2016. However, SCG recently
19 provided the 2017 recorded expenses for O&M activities. The 2017 recorded for
20 Leak Survey is \$7.955 million. ORA recommends using the two-year average of
21 2016 and 2017 recorded expenses as the base amount. This method is consistent
22 with Commission precedent and guidance, and reflects the most recent expenses for
23 M&R work. The ORA recommended amount using the two-year average of 2016
24 and 2017 expenses is \$7.518 million. The ORA forecast is \$802,000 lower than
25 SCG’s proposed base amount of \$8.320 million.

26 **b. Bi-Annual High-Pressure Leak Survey**

27 SCG requests an increase of \$1.035 million for 2019 to perform additional
28 leak surveys.²² According to SCG, General Order (GO) 112-F requires surveying

²² Ex. SCG-04-R, p. GOM-39.

1 Department of Transportation (DOT)-defined high-pressure transmission pipelines
2 (or supply lines) twice a year instead of once a year as previously required.²³ GO
3 112-F, which went into effect January 1, of 2017, requires the following for
4 distribution and transmission systems: “A gas leakage survey of transmission
5 pipelines, using leak detecting equipment must be conducted at least twice each
6 year and at intervals not exceeding 7.5 months”.²⁴

7 According to SCG, as of November 30, 2017, the utility has surveyed
8 approximately 1,538 miles as part of the six-month survey cycle.²⁵ SCG forecasts
9 surveying 3,643,200 feet, or 690 miles, each year for 2017 and 2018. The annual
10 expense SCG proposes each year for 2017 and 2018 is \$190,717.²⁶

11 For 2019, SCG requests \$1.032 million, an increase of \$841,000 above the
12 expenses of 2017 and 2018, to survey 19,721,179 feet, or 3,735 miles. ORA asked
13 SCG to provide the annual number of high-pressure supply lines the utility surveyed
14 and expenses incurred for the period 2012-2016, as that information would enable
15 ORA to determine the additional number of surveys SCG would need to perform and
16 incremental cost to be in compliance with the new requirement. SCG did not provide
17 this information.

18 The utility responded that “SoCalGas does not track leak survey costs to this
19 level of granularity. All leak survey conducted by Gas Distribution is recorded in the
20 Leak Survey cost category, regardless of pipe category or survey cycle.”²⁷ Without
21 knowing the number of miles of high-pressure pipelines SCG surveyed annually, or
22 how much the surveys cost, SCG’s request for an additional \$1.032 million to survey
23 3,725 miles for 2019 is unwarranted and inadequately supported.

²³ Ex. SCG-04-R, p. GOM-39.

²⁴ G.O. 112-F, Section 143.1 (b).

²⁵ SCG’s response to ORA data request ORA-SCG-045-DAO, Q.2(b).

²⁶ Ex. SCG-04-R, WP, p. 32.

²⁷ SCG’s response to ORA data request ORA-SCG-045-DAO, Q. 1(b).

1 In its workpapers, SCG does not provide any historical expenses or the
 2 number of high-pressure miles surveyed. The sum total of support for its request is
 3 a table showing the forecasted 2017-2019 labor and non-labor expenses. SCG's
 4 workpapers are presented below.

5 **Figure I**
 6 **SCG-04-R Workpapers for Leak Survey**

<u>Labor</u>							
[A]	[B]	[C] ((B/A) x 8)	[D]	[E] (CxD)	[F]	[G] (E+F)	
High Pressure Bi-Annual Survey Footage	Survey Footage Per Day	Total Hours	Represented Rate	Total Labor Cost	Calculated Vacation and Sick	Total Labor Cost with V&S	
2017	3,643,200	6,114	4,767	\$ 34.35	\$ 163,747	\$ 26,969	\$ 190,717
2018	3,643,200	6,114	4,767	\$ 34.35	\$ 163,747	\$ 26,969	\$ 190,717
2019	19,721,179	6,114	25,805	\$ 34.35	\$ 886,389	\$ 145,988	\$ 1,032,377

<u>Non-Labor</u>			<u>Vacation & Sick</u>			
[H]	[I] (HxL)	[J] (G+I)	[M]	[N] (CxM)		
Non-Labor Cost per FTE	Total Non-Labor Cost	Total Labor and Non-Labor	V&S Rate	V&S Hours		
2017	\$ 226.00	\$ 603	\$ 191,320	2017	0.1647	785
2018	\$ 226.00	\$ 601	\$ 191,318	2018	0.1647	785
2019	\$ 226.00	\$ 3,253	\$ 1,035,630	2019	0.1647	4,250

7
 8 GO 112-F went into effect January 1 2017. CPUC decision D.15-06-044,
 9 adopted the new requirement of GO-112-F, and ordered compliance with Section
 10 143, which required bi-annual leak surveys, as soon as feasible but no later than
 11 January 1, 2017.²⁸

12 GO 112-F requires utilities to perform twice as many surveys of its high-
 13 pressure transmission lines compared to previous years, starting January 1, 2017.
 14 SCG has not adequately supported the incremental number of miles (3,700 miles),
 15 the utility proposes to survey, or the annual expenses (\$1.035 million) it expects.
 16 Without any historical survey data of high-pressure pipelines, ORA is not convinced
 17 the number of miles to be surveyed can be determined. ORA recommends that SCG

²⁸ GO 112-F, Change List of Decisions and Resolutions which Authorized Changes to General Order 112 Applicable to Gas Operators.

1 not be granted its request for \$1.035 million of incremental funding for high-pressure
2 leak survey because it is unsubstantiated and inadequately supported.

3 **c. Enhanced Leak Survey-Early Vintage Plastic**
4 **Pipe**

5 SCG requests \$1.690 million to increase survey cycle requirements for all
6 pre-1986 plastic pipe (Aldyl-A) from a five-year survey cycle to an annual cycle.²⁹

7 SCG currently has 24,200 miles of Aldyl-A pipeline,³⁰ of which 8,200 miles
8 are the pre-1986 Early Vintage Aldyl-A pipes.³¹

9 ORA does not dispute SCG's proposal to increase the survey frequency of
10 Aldyl-A pipes by performing annual surveys. However, ORA recommends the
11 Commission require SCG to adhere to its proposed annual survey cycle, and to
12 repair and replace the Aldyl-A pipelines as necessary, during the 2019 GRC cycle.

13 **d. Fueling Our Future**

14 SCG proposes a net Fueling Our Future (FOF) benefit savings of \$334,000
15 for Leak Survey. ORA does not dispute SCG's FOF savings proposal.

16 **C. Measurement and Regulation (M&R)**

17 This workgroup is responsible for maintaining and operating: (1) regulator
18 stations; (2) medium and large customer meters (MSAs); and (3) associated
19 components.³² According to SCG, there are currently approximately 1,975 regulator
20 stations and approximately 102,000 medium and large customer MSAs.³³

21 Regulator stations reduce the pressure of gas entering the distribution system
22 from high-pressure pipelines. Federal pipeline regulation requires SCG to perform

²⁹ Ex. SCG-04-R, p. GOM-39.

³⁰ SCG's response to data request ORA-SCG-45-DAO, Q.6(d).

³¹ Id.

³² Ex. SCG-04-R, p. GOM-41

³³ Ex. SCG-04-R, p. GOM-41

1 annual inspections and maintenance of all regulator stations to ensure they are in
2 good mechanical condition.³⁴

3 Medium and large customer MSAs need to be routinely maintained per the
4 requirements of GO 58-A. SCG needs to periodically maintain, repair, and test the
5 meters, and regulators, and other equipment components, to ensure gas volume is
6 measured accurately and customers' capacity requirements are met.³⁵

7 The SCG 2012-2016 recorded expenses and 2019 forecasts are in the table
8 below. Also included is ORA's forecast for comparison purposes.

9 **Table 11-9**
10 **Measurement and Regulation Expenses**
11 **2012-2016 Recorded and 2019 Forecasts**
12 **(In Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Measurement & Reg.	\$11,839	\$12,438	\$12,895	\$13,329	\$13,831	\$14,889	\$13,150

13 Source: Ex. SCG-04-R-WP, p. 46.

14 **1. Overview of SCG's Request**

15 SCG requests \$14.889 million to perform M&R work activities,³⁶ which is
16 \$1.057 million above the 2016 recorded amount of \$13.831 million. SCG's request
17 is based on a 5-year (2012-2015) linear trend, plus \$264,000 for Advanced Metering
18 Infrastructure (AMI) remediation, plus \$120,000 to replace approximately 3,000
19 Meter Transmission Unit (MTU) batteries, and savings of \$60,000 from FOF and
20 \$741,000 from AMI benefits.³⁷

21 **2. ORA's Analysis**

22 ORA recommends \$13.150 million as its 2019 expense forecast, which is
23 \$1.738 million lower than SCG's request. ORA's recommendation is based on

³⁴ Ex. SCG-04-R, p.GOM-41.

³⁵ Id.

³⁶ Ex. SCG-04-R, p. GOM-41.

³⁷ Ex. SCG-04-R, pp. GOM-43 to GOM-44.

1 applying a different method to determine the base amount, accepting SCG's
2 incremental requests for AMI remediation and MTU battery replacements, plus
3 SCG's proposed credits for FOF and for AMI. ORA's recommendation is
4 comparable to recent spending for M&R.

5 **a. Base Amount**

6 SCG uses a linear trend to determine the base amount for 2019. This
7 method results in an increase of \$1.474 million above the 2016 recorded amount of
8 \$13.831 million for M&R.³⁸ ORA disputes SCG's methodology and recommends the
9 Commission adopt the use of LRY as the more appropriate method. According to
10 the many Commission decisions regarding the principles of forecast methodologies,
11 such as decisions D.89-12-057 and D.15-11-021 excerpted in Section I above, if
12 recorded expenses in an account have shown a trend in a certain direction over
13 three or more years, the LRY is an appropriate base estimate. The recorded
14 expenses show a steady upward trend from 2012 to 2016.

15 The LRY SCG identifies in testimony is 2016. However, SCG recently
16 provided the 2017 recorded expenses for O&M activities. The 2017 recorded for
17 M&R is \$13.303 million. ORA recommends using the two-year average of 2016 and
18 2017 recorded expenses as the base amount. This method is consistent with
19 Commission guidance, and reflects the most recent expenses for M&R work. The
20 ORA recommended amount using the two-year average of 2016 and 2017 expenses
21 is \$13.567 million. The ORA forecast is \$1.738 million lower than SCG's proposed
22 base amount of \$15.305 million.

23 **b. Incremental Increases for AMI Remediation**
24 **and MTU Battery Replacements**

25 SCG requests an incremental increase of \$264,000 above the base year level
26 to perform AMI meter remediation. SCG also requests an increase of \$120,000
27 above base year level to replace MTU batteries attached to either an electronic
28 pressure monitor or an electronic volume corrector. ORA does not dispute SCG's
29 requests.

³⁸ Ex. SCG-04-R, p. GOM-42.

1 **c. FOF Savings and AMI Benefits**

2 SCG proposes a net FOF benefit savings of \$60,000. SCG also proposes a
3 net AMI benefit savings of \$741,000. ORA does not take issue with the credits and
4 benefits proposed by SCG.

5 **D. Cathodic Protection**

6 Cathodic protection (CP) is one method of corrosion control on steel
7 pipelines. According to SCG, CP prevents steel pipelines from reverting back to
8 their natural state as an iron oxide, which could weaken the pipelines leading to an
9 increase in potential leaks.³⁹ CP is applied by using an electric current flow toward
10 the surface of the pipeline to reduce corrosion on the pipeline system. SCG is
11 required to evaluate and monitor its distribution steel pipelines and maintain an
12 effective CP system per 49 C.F.R. § 192.465.⁴⁰

13 The 2012-2016 recorded expenses for Cathodic Protection is presented in the
14 table below.

15 **Table 11-10**
16 **Cathodic Protection Expenses**
17 **2012-2016 Recorded and 2019 Forecast**
18 **(In Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Cathodic Protection	\$9,659	\$10,442	\$12,232	\$12,640	\$14,403	\$18,321	\$14,300

19 Source: Ex. SCG-04-R-WP, p. 46.

20 **1. Overview of SCG’s Request**

21 For 2019, SCG requests \$18.322 million, which is an increase of \$3.919
22 million above the 2016 recorded expenses of \$14.403 million.⁴¹

23 SCG’s forecast is based on a five-year (2012-2016) historical linear trend,
24 plus an incremental increase of \$650,000 for the re-evaluation of existing shift areas,

³⁹ Ex. SCG-04-R, p. GOM-45.

⁴⁰ Id.

⁴¹ Ex. SCG-04-R, p. GOM-45.

1 and a savings of \$47,000 from FOF benefits.⁴² SCG proposes that starting in 2019,
2 and each year thereafter, the utility will verify 175 packages in these areas.⁴³ The
3 verification of CP packages is performed as part of SCG's re-evaluation of certain
4 areas to measure the effectiveness of existing cathodic protection systems.

5 **2. ORA's Analysis**

6 SCG's 2019 Cathodic Protection forecast of \$3.919 million consists of a base
7 year amount, determined by a linear trend of 2012-2016 recorded expense, which
8 results in an increase of \$3.316 million, and an incremental expense of \$650,000 for
9 Cathodic Protection System Enhancement.⁴⁴ ORA recommends \$14.300 million for
10 2019. ORA's recommendation is based on applying a different method to determine
11 the base amount, accepting SCG's incremental request for CP system
12 enhancement, and the FOF benefit amount. ORA's recommendation is comparable
13 to recent actual spending for Cathodic Protection.

14 **a. Base Amount**

15 ORA disputes SCG's use of trending to determine the base amount. The use
16 of trending is not an appropriate method to forecast future expenses given the
17 steady increase of expenses over the 5-year period from 2012-2016. See the table
18 of historical costs presented above. The more appropriate method is the use of the
19 LRY as the base amount. According to the many Commission decisions regarding
20 the principles of forecast methodologies, such as decisions D.89-12-057 and D.15-
21 11-021, if recorded expenses in an account have shown a trend in a certain direction
22 over three or more years, the LRY is an appropriate base estimate. The LRY SCG
23 identifies in testimony is 2016.

24 However, SCG recently provided the 2017 recorded expenses for O&M
25 activities. The 2017 recorded for Cathodic Protection is \$12.990 million. ORA
26 recommends using the two-year average of 2016 and 2017 recorded expenses as

⁴² Ex. SCG-04-R, pp. GOM-47 to GOM-48.

⁴³ Ex. SCG094-R, p. GOM-47.

⁴⁴ Ex. SCG-04-R, pp. GOM-47 to GOM-48.

1 the base amount. This method would be in line with Commission guidance, and
2 would also reflect the most recent expenses for Cathodic Protection work. The ORA
3 recommended amount using the two-year average of 2016 and 2017 expenses is
4 \$13.697 million. The ORA forecast is \$4.022 million lower than SCG's proposed
5 base amount of \$17.719 million.

6 **b. Cathodic Protection System Enhancement**

7 SCG requests an incremental expense of \$650,000 to reevaluate the
8 effectiveness of previously installed CP packages.⁴⁵ ORA does not take issue with
9 this SCG request.

10 **c. Fueling Our Future**

11 SCG proposes a net FOF benefit savings of \$47,000 for Cathodic Protection.
12 ORA does not dispute SCG's FOF credit proposal.

13 **E. Main Maintenance**

14 The work activities, generally corrective in nature, are tracked under Main
15 Maintenance are: (1) leak evaluation; (2) leak repairs; (3) franchise alterations; (4)
16 compliance maintenance, and (5) miscellaneous main maintenance. According to
17 SCG, the utility's field service personnel perform leak surveys while completing other
18 field work assignments or via customer calls. When leaks are identified, field service
19 personnel code the leaks based on a number of factors including location,
20 concentration of gas, and potential hazard to the public and property. Federal and
21 state pipeline safety regulations require SCG to take immediate action to repair
22 hazardous leaks, while non-hazardous leaks can be repaired within three years.⁴⁶

23 **1. Overview of SCG's Request**

24 SCG requests \$20.772 million for Main Maintenance in 2019.⁴⁷ This
25 amount is \$9.389 million above the recorded amount of \$11.383 million.⁴⁸ There

⁴⁵ Ex. SCG-04-R, p. GOM-47.

⁴⁶ Ex. SCG-04-R, p. GOM-50.

⁴⁷ Ex. SCG-04-R, p. GOM-49.

1 are three cost components that make up SCG's request: (1) a five year (2012-2016)
 2 linear trend of expenses, which results in an increase of \$million; (2) a five-year
 3 (2012-2016) average of damage credit,⁴⁹ which is \$2.737 million,⁵⁰ and (3) \$6.000
 4 million in incremental costs to repair leaks from its previous TY 2016 GRC leak
 5 inventory. Also, a credit amount of \$1.244 million in FOF benefit savings is applied to
 6 the 2019 forecast.

7 The 2012-2016 recorded expenses and 2019 forecast for Main Maintenance
 8 is presented in the table below along with ORA's 2019 forecast.

9 **Table 11-11**
 10 **Main Maintenance Expenses**
 11 **2012-2016 Recorded and 2019 Forecast**
 12 **(In Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Main Maintenance	\$13,302	\$9,773	\$16,103	\$13,008	\$11,383	\$20,771	\$10,139

13 Source: Ex. SCG-04-R, WP, p. 57.

14 **2. ORA's Analysis**

15 SCG requests \$20.772 million for Main Maintenance for 2019. ORA
 16 recommends \$10.139 million for 2019 based on differing forecast methodology, and
 17 zero funding for incremental expenses.

18 ORA takes issue with SCG's use of trending historical expenses and the
 19 application of the five-year 2012-2016 average of damage credits to determine the
 20 base year amount for this work category. ORA recommends using the LRY method
 21 to forecast the 2019 funding for both expense and damage credits for Main
 22 Maintenance. This method yields \$11.383 million as the 2019 base year amount.
 23 ORA opposes SCG's request of incremental expenses to address the leak inventory
 24 backlog. ORA accepts SCG's FOF credit amount of \$1.244 million.

(continued from previous page)

⁴⁸ Id.

⁴⁹ Damage Credits are funds SCG collects from third party damages.

⁵⁰ Ex. SCG-04-R, WP, p. 68.

1 **a. Base Amount**

2 SCG's forecast is determined using a base amount derived from a linear
3 trend of the 2012-2016 recorded expenses, and 2017-2018 forecasts.⁵¹ This results
4 in the amount of \$18.752 million. To this amount, SCG applies a credit amount of
5 \$2.737 million, derived from the 5-year average of 2012-2016 recorded expenses of
6 damage credits,⁵² resulting in a base year amount of \$16.016 million, which is an
7 increase of \$4.633 million above the 2016 recorded expenses of \$11.383 million.⁵³
8 ORA disputes SCG's trending method and the use of the 5-year average for damage
9 credits.

10 In this instance, using the LRY is more appropriate than a trend for
11 forecasting purposes. As stated in Commission decision D.89-12-057, when the
12 recorded expenses of an account have shown a trend in a certain direction over
13 three or more years it is appropriate to use the LRY as the base amount.⁵⁴ The
14 expenses for Main Maintenance have shown a decreasing trend from 2014-2016, as
15 can be seen in the table above. Therefore, using the LRY expense amount is
16 reasonable. The LRY amount as shown in SCG testimony is \$11.383 million or
17 \$15.626 million without applying damage credits.⁵⁵

18 The damage credits recorded in this account also show a downward trend
19 over the 3-year period of 2014-2016. Therefore, the use of the LRY damage credits
20 as an estimating tool is also appropriate.

21 ORA recommends using the LRY expense of \$11.383 million as the base
22 amount.^{56,57} The ORA base amount is determined by using the 2016 main

⁵¹ Ex. SCG-04-R-WP, p. 68.

⁵² Ex. SCG-04-R-WP, p. 68.

⁵³ Ex. SCG-04-R, p. GOM-52.

⁵⁴ D.89-12-057, p. 15.

⁵⁵ Ex. SCG-04-R, WP, p. 68.

⁵⁶ The use of 2017 recorded expenses for Main Maintenance would be inappropriate here because SCG is including expenses to repair leaks in its backlog that would not be included in the test year period. In its workpapers, SCG-04-R, p. 67, SCG proposed to spend \$7,000

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1 maintenance expense of \$15.626 million and applying the LRY damage credit
 2 amount of \$4.243 million. The ORA base amount of \$11.383 million is \$4.633
 3 million lower than SCG's proposed amount of \$16.016 million.

4 **b. Backlog of Leak Repairs**

5 SCG requests an increase of \$6.000 million to perform leak repairs it claims
 6 are backlogged at year end.⁵⁸ The utility proposes to repair an additional 2,800
 7 leaks in 2017, 4,870 leaks in 2018, and 2,400 in 2019 leaks above the 2016
 8 recorded number.⁵⁹ The table below provides a summary of SCG's forecasts for
 9 2017-2019 and the 2016 recorded number of pending leaks and expenses incurred
 10 for main leak repairs, and the proposed repairs and expenses for 2017-2019.

11
 12 **Table 11-12**
 13 **Main Maintenance**
 14 **Summary of SCG's Leak Backlog Forecasts**

	Recorded	SCG Forecast		
	2016	2017	2018	2019
Incremental Repair Requests	N/A	2,800	4,870	2,400
Pending Leaks	10,435	7,635	2,765	365
Expenses (in '000s of Dollars)	\$8,194 ⁶⁰	\$7,000	\$12,175	\$6,000

15 Source: SCG's 2017-2019 forecasts from ex. SCG-04-R-WP, p. 58.

16 According to SCG, it did not reduce the leak inventory proposed in the
 17 TY2016 GRC.⁶¹ In the 2016 GRC, SCG proposed to reduce to backlog by repairing
 18 an incremental 800 main leaks in 2015 and 1,600 incremental main leaks every year

(continued from previous page)
 million to reduce the backlog.

⁵⁷ As of February 9, 2018, SCG has not provided the 2017 damage credit amount. SCG states that 2017 financial data is not yet available.

⁵⁸ Ex. SCG-04-R, p. GOM-54.

⁵⁹ Ex. SCG-04-R, p. GOM-53.

⁶⁰ SCG's response to data request ORA-46-DAO, Q. 3(a).

⁶¹ Ex. SCG-04-R, p. GOM-53.

1 starting in 2016, for a total of 5,600 leaks, above the 2014 base year level.⁶² SCG
 2 states its leak inventory has gone up a total of 7,670 for 2017 and 2018.⁶³ SCG
 3 proposes that anything incremental to the 5,600 leaks proposed in its 2016 GRC
 4 would require additional funding in the TY2019 period.⁶⁴

5 The number of incremental repairs SCG requests above base year level is
 6 excessive given the historical pattern of leak repairs. On average, SCG repaired
 7 3,541 leaks per year during the 2012-2016 timeframe. The table below shows the
 8 number of main leaks repaired and the O&M costs incurred each year from 2012-
 9 2016.

10
 11 **Table 11-13**
 12 **SCG's Main Leak Repairs and Expenses from 2012-2016**

Main Leak Repairs					
	2012	2013	2014	2015	2016
Leaks Repaired	3,698	3,808	4,147	2,939	3,111
Total Cost	\$ 7,386,805	\$ 7,178,631	\$ 8,421,188	\$ 7,439,882	\$ 8,194,221

13
 14 Source: SCG's response to data request ORA-046-DAO, Q. 3(a).

15 As can be seen in the table above, in 2015 SCG repaired 800 fewer leaks
 16 compared to the 2013 level, contrary to what the utility had forecasted in its 2016
 17 GRC. In fact, the number of leaks repaired in 2015 was 23% fewer than the 2013
 18 level. SCG also did not meet its commitment to repair an additional 1,600 leaks
 19 every year starting in 2016. For 2017, SCG did not meet its commitment to repair an
 20 additional 2,800 leaks above the 2016 recorded number of 3,111 leaks, which would
 21 have been 5,911 leaks. As of November 30, 2017, SCG repaired 4,477 leaks and
 22 incurred \$12.102 million in costs.⁶⁵ The November 30, 2017, number is 1,434 fewer
 23 leaks than SCG's original forecast. Based on SCG's proposal for 2019, it will be

⁶² Id.

⁶³ Id.

⁶⁴ Id.

⁶⁵ SCG's response to data request ORA-046-DAO, Q.3(e).

1 performing an additional 7,270 leak repairs above the base year number. SCG's
2 request should be rejected because it was not able to fulfil its commitments of
3 managing the non-hazardous leak inventory in the 2016 GRC.

4 The backlog of non-hazardous leaks that SCG proposed to reduce by 2019 is
5 the same inventory of leaks present in the 2016 GRC, and which existed at the end
6 of 2013.⁶⁶ As can be seen in the table below, a backlog of non-hazardous leaks has
7 existed for several years. As of November 2017, the number of non-hazardous leaks
8 is 10,559.⁶⁷

9 **Table 11-14**
10 **SCG's Backlog of Non-Hazardous from 2012-2016**

11

Non Hazardous Pending Leaks by Year					
	2012	2013	2014	2015	2016
Leaks	7,770	8,496	8,282	9,462	10,435

12 SCG's request for expenses to repair non-hazardous leaks in the backlog
13 should not be included in this GRC. The appropriate mechanism for cost recovery of
14 the backlog is through the New Environmental Regulation Balancing Account
15 (NERBA). Commission decision D.17-06-015, issued on June 15, 2017, ordered
16 utilities to eliminate their backlog of leaks within three years of the effective date of
17 that decision.⁶⁸ As part of the adopted Best Practices 21 (BP 21), the Commission
18 requires leaks to be repaired as soon as reasonably possible after discovery within
19 three years. In Ordering Paragraph 7 of this same decision, the Commission
20 directed SCG specifically to establish a sub-account (Memorandum Account) in the
21 utility's already existing NERBA to track expenditures as part of the Natural Gas
22 Leak Abatement Program. The Commission also stated that respondents/SCG shall
23 not begin to recover Natural Gas Leak Abatement Program costs in rates until the
24 Commission has adopted cost forecasts and cost limits in response to the Tier 3
25 Advice Letters and approved Compliance Plans required by this decision.

⁶⁶ SCG's response to data request ORA-46-DAO, Q. 6(b).

⁶⁷ SCG's response to data request OR-46-DAO, Q.3(c).

⁶⁸ D.17-06-015, Ordering Paragraph 5.

1 On December 15, 2017, SCG filed Advice Letter (AL) 5234-G, seeking
2 modification of its NERBA. The proposed modification was to revise the language of
3 the NERBA sub-account to include the following language allowing the utility to
4 record the costs of "...other new emergent regulatory requirements governing gas
5 leakage abatement for gas infrastructure," in addition to the costs associated with
6 compliance with the rules and procedures under Senate Bill 1371.⁶⁹ On March 7,
7 2018, the Commission's Energy Division approved the AL 5234 and set December
8 15, 2017 as the effective date.⁷⁰

9 The Commission has authorized the tracking of repair costs for non-
10 hazardous leaks, and SCG has in place a memorandum account as part of its
11 NERBA, to track the costs for future recovery. It is not appropriate for SCG to be
12 funded for costs to clear its leak backlog in this GRC. Therefore, ORA recommends
13 zero funding and not the \$6.000 million that SCG requests for 2019.

14 **c. Fueling Our Future**

15 SCG proposes a net FOF benefit savings of \$1.244 million for Main
16 Maintenance in 2019. ORA does not dispute this proposal.

17 **F. Service Maintenance**

18 According to SCG, Service maintenance work is comprised of the following
19 four activities: (1) evaluation and repair of service leaks, (2) service alterations, (3)
20 MSA alterations and meter guard replacements, and (4) miscellaneous service and
21 MSA maintenance.⁷¹ The work activities are designed to meet federal and state
22 pipeline safety regulations and to extend the life of the distribution pipeline system.⁷²

23 The SCG 2012-2016 recorded and 2019 forecast, along with ORA's 2019
24 recommendation, is presented in the table below.

⁶⁹ See SCG's Advice No. 5234 for U904G.

⁷⁰ Letter dated March 7, 2018 from Edward Randolph, Director of Energy Division to Southern California Gas Company, Ray B. Ortiz.

⁷¹ Ex. SCG-04-R, p. GOM-57.

⁷² Id. p. GOM-56.

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Table 11-15
Service Maintenance Expenses
2012-2016 Recorded and 2019 Forecast
(In Thousands of 2016 Dollars)

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Service Maintenance	\$10,133	\$7,514	\$11,613	\$11,379	\$10,339	\$16,996	\$11,390

5 Source: Ex. SCG-04-R-WP, p. 71.

6 **1. Overview of SCG’s Request**

7 For 2019, SCG requests \$16.997 million, an increase of \$6.658 million above
8 the 2016 recorded amount of \$10.339 million.⁷³ SCG’s forecast comprises a base
9 year amount using a five-year (2012-2016) linear trend, which results in an increase
10 of \$1.995 million, plus incremental expenses of \$4.663 million. The incremental
11 expense amount of \$4.663 million consists of the following: (1) \$1.523 million for
12 MSA Maintenance Activities, (2) \$1.109 million for Meter Guard Activities, and (3)
13 \$2.106 million to disconnect chronically inaccessible MSAs.⁷⁴ SCG also proposes a
14 Fueling Our Future savings of \$75,000 for Service Maintenance.

15 **2. ORA’s Analysis**

16 ORA disputes SCG’s request of \$16.996 million for 2019 as excessive and
17 inadequately supported. Instead, ORA recommends \$11.390 million for 2019.
18 ORA’s recommendation is derived from a lower base amount, no funding for the
19 requested 3 incremental increases, and the \$75,000 FOF credit.

20 ORA’s recommendation amount of \$11.390 million is \$5.606 million lower
21 than SCG’s forecast of \$16.996 million. ORA’s forecast is comparable to historical
22 spending for this account.

23

⁷³ Id. p. GOM-57.

⁷⁴ Ex. SCG-04-R, pp. GOM-59 to GOM-61.

1 **a. Base Amount**

2 SCG's base year amount is determined by using a 5-year linear trend of
3 recorded expenses from 2012-2016.⁷⁵ ORA disputes SCG's methodology because
4 the recorded expenses for this account shows a declining trend for a period of 3-
5 years, from 2014-2016. The Commission has stated that it is appropriate to use the
6 LRY expense as the base amount for an account that has shown a trend in a certain
7 direction over three or more years.⁷⁶

8 In SCG's testimony, the LRY is the 2016 recorded amount, which is \$10.339
9 million. However, recently SCG has provided the 2017 recorded amount for this
10 account, which is \$12.591 million. ORA recommends that base amount be an
11 average of the 2016 and 2017 recorded spending. This is reasonable because it
12 incorporates the LRY as presented in SCG testimony, and the latest recorded
13 expenses for this account. The 2-year average amount is \$11.465 million.

14 ORA's recommendation of \$11.465 million is \$869,000 lower than SCG's
15 forecast of \$12.334 million.

16 **b. MSA Maintenance**

17 SCG requests an additional \$1.523 million in 2019 to address increasing MSA
18 Maintenance work.⁷⁷ SCG's forecast is unsubstantiated because the level of MSA
19 Maintenance work will not be increasing as SCG claims. Instead, the MSA
20 Maintenance work in 2019 will be decreasing relative to the base year.

21 SCG explains that MSA maintenance activities are follow up work performed
22 after Customer Service technicians have performed inspections of customer MSAs
23 through the MSA Inspection Program.⁷⁸ SCG's MSA inspections are covered in
24 another exhibit, Ex. SCG-18. SCG states that, "As Customer Services increases the
25 number of MSA inspections, the amount of work orders generated for maintenance

⁷⁵ Ex. SCG-04-R, p. GOM-58.

⁷⁶ D.89-12-057, p. 15.

⁷⁷ Ex. SCG-04-R, p. GOM-59.

⁷⁸ Id.

1 follow up will continue to increase. This includes work items such as repair or
2 replacement of risers, service valves, small MSAs, and meter guards.”⁷⁹

3 In 2016, SCG processed 20,078 maintenance orders.⁸⁰ In 2017, SCG
4 processed 17,376 orders, which is 2,702 (or 13.5%) fewer orders than the base
5 year.⁸¹ SCG stated that it would increase the number of orders processed by
6 approximately 1,500 in 2017.⁸² The table below provides a summary of the number
7 of MSA maintenance orders processed and the expenses incurred annually from
8 2012-2017.⁸³

9 **Table 11-16**
10 **SCG MSA Maintenance Completed Orders**

MSA Maintenance Orders (2012 - 2017 YTD)						
	2012	2013	2014	2015	2016	2017
Expenses	\$ 4,659,855	\$ 4,233,916	\$ 4,585,740	\$ 4,173,110	\$ 3,914,553	\$ 3,756,558
Orders	20,724	21,238	22,913	20,149	20,078	17,376

* 2017 YTD includes work completed through November 30, 2017.

11

12 As can be seen in the table above, the numbers of MSA maintenance orders
13 and expenses have decreased over the last 4-year period, from 2014 to 2017, with
14 the lowest number of orders and expenses occurring in 2017.

15 For 2019, SCG is proposing to perform fewer, not more, annual inspections
16 than the 2017 recorded number.^{84,85} SCG estimates that it will perform 2,078,797
17 MSA inspections in 2019 and 2,086,486 in 2017.⁸⁶ The 2019 proposal is 7,689

⁷⁹ Id.

⁸⁰ SCG’s response to data request ORA-049-DAO, Q. 3(b).

⁸¹ Id.

⁸² Ex. SCG-04-R, p. GOM-59.

⁸³ SCG’s response to data request ORA-049-DAO, Q. 3(b).

⁸⁴ Ex. SCG-18, WP, p. 116.

⁸⁵ There is no SCG recorded data for MSA inspections provided for any years prior to 2017 in SCG witness G. Marelli’s workpapers.

⁸⁶ Ex. SCG-18, WP, p. 116.

1 fewer inspections than the 2017 number.⁸⁷ SCG's claim that it will be performing
2 more MSA maintenance due to an increase in the number of MSA inspections is
3 unsubstantiated.

4 SCG's incremental request of \$1.523 million for MSA Maintenance Activities
5 should be rejected. ORA recommends no incremental funding for this work
6 category.

7 **c. Meter Guards**

8 SCG requests an additional \$1.109 million to maintain meter guards that are
9 installed to protect the MSA at existing customer locations from traffic in accordance
10 with state and federal code.⁸⁸ SCG's 2019 forecast, which is 5,000 orders, is
11 cumulative of orders the utility proposed to be processed from 2017-2019: 500
12 orders in 2017, 1,000 in 2018, and 3,500 in 2019.⁸⁹

13 When asked to provide support for the forecasts, SCG provided the following
14 statement:

15 *SoCalGas has an inventory of Meter Guard orders due to an increase*
16 *in the number of MSA inspections completed by the Customer Service*
17 *team, as discussed in the testimony of Witness Gwen Marelli (Exhibit*
18 *SCG-18). SoCalGas plans to reduce this inventory by half during the*
19 *next three years. SoCalGas forecasted ramping up this effort starting*
20 *with 500 Meter Guard orders in 2017, 1,500 in 2018, and 3,000 TY*
21 *2019.*⁹⁰

22 The forecasted increase in meter guard orders as a result of a forecasted
23 increase in the number of MSA inspections by the Customer Service team is not
24 substantiated. As discussed in the section above, MSA maintenance, the 2019 MSA
25 inspection proposal is 7,689 fewer inspections than the 2017 number.⁹¹ SCG did
26 not provide any other support for the claim that there is an inventory of meter guards

⁸⁷ Id.

⁸⁸ Ex. SCG-04-R, p. GOM-60.

⁸⁹ Ex. SCG-04-R, p. GOM-60.

⁹⁰ SCG's response to data request ORA-049-DAOm Q, 3 (d).

⁹¹ Id.

1 that need to be processed, or why the utility plans to reduce this inventory by half by
2 2019.

3 SCG's proposal to maintain 5,000 additional meter guards above the base
4 year level is excessive, unsupported, and unrealistic. From 2012-2017, the highest
5 number of meter guard orders SCG processed is 124 orders in 2016, and the fewest
6 number of orders is 25 recorded for 2013.⁹² SCG processed 81 orders in 2017.⁹³
7 The annual number of meter guard orders completed and expenses incurred from
8 2012-2017 are presented in the table below.

9 **Table 11-17**
10 **SCG Meter Guard Completed Orders**

Meter Guard Orders (2012 - 2017 YTD)						
	2012	2013	2014	2015	2016	2017
Expenses	\$ 19,225	\$ 8,214	\$ 37,529	\$ 39,852	\$ 48,327	\$ 23,215
Orders	51	25	96	119	124	81

* 2017 YTD includes work completed through November 30, 2017.

11
12 Source: SCG's response to ORA-049-DAO, Q. 3(c).

13 SCG's incremental request of \$1.109 million to maintain additional meter
14 guards should be rejected as unsupported and unrealistic. ORA recommends zero
15 additional funding for incremental meter guard maintenance.

16 **d. Inaccessible MSAs—Disconnect Services**

17 SCG requests an incremental increase of \$2.106 million to disconnect
18 customer services by cutting and capping a total of 1,073 gas service lines by 2019;
19 364 in 2018 and 709 in 2019.⁹⁴

20 According to SCG, the 2019 forecast is based on applying 0.4% to the
21 number of forecasted annual inspections for the MSA inspection program, and then
22 applying 7.8% to that number to derive the 364 disconnects for 2018 and 709 for
23 2019.⁹⁵

⁹² SCG's response to data request ORA-049-DAO, Q. 3(c).

⁹³ Id.

⁹⁴ Ex. SCG-04-R, p. GOM-60.

⁹⁵ SCG's response to data request ORA-049-DAO, Q. 3(f) (i), Attachment.

1 SCG's disconnect forecast for 2018 and 2019 is based on a forecast of MSA
2 inspections for 2018 and 2019. No other support is provided. SCG did not explain
3 how it derived the 0.4% figure. To support the 7.8%, SCG claims that in 2016,
4 SCG's Collections group sent out collection letters to 219 facilities and that 17 of
5 these facilities were cut, resulting in the 7.8%.

6 SCG does not have adequate support for this request. When asked about
7 historical disconnects and costs, as service disconnections are not a new activity,
8 SCG did not provide the information requested. SCG states the following:

9 *SoCalGas has not tracked the historical expenses [or the number of*
10 *disconnects completed] specifically associated with chronically*
11 *inaccessible MSA. Costs for this type of activity would have been*
12 *tracked in the overall Service Maintenance category. SoCalGas has*
13 *rarely used this service disconnection process in the past. The*
14 *forecast included in testimony is to increase the number of service*
15 *disconnects.*⁹⁶

16 The only information SCG provided about disconnect activities is that the
17 2016 recorded number of services cut was 17 facilities.⁹⁷ There is no indication or
18 assurance that SCG will perform the 1,073 disconnects that it proposes for 2019.
19 Gas service line disconnections are not new activities to be funded during the Test
20 Year. There has been embedded funding for service disconnects in past GRCs.
21 SCG did not show that the work and expenses are reasonable so its \$2.106 million
22 request should be rejected. ORA recommends zero incremental funding for service
23 disconnects.

24 **e. Fueling Our Future Credit**

25 SCG proposes an FOF credit amount of \$75,000 for Service Maintenance.
26 ORA does not dispute this credit amount.

⁹⁶ SCG's response to data request ORA-049-DAO, Q. 3(e).

⁹⁷ SCG's response to data request ORA-049-DAO, Q. 3(f)(i).

1 **G. Field Support**

2 Field support expenses are to provide support services for the daily O&M
3 activities within Gas Distribution Operations. According to SCG, the primary
4 components are: (1) field supervision, (2) clerical support, (3) dispatch operations,
5 (4) off-production time, (5) materials and support, and (6) removal of abandoned
6 mains.⁹⁸

7 The SCG 2012-2016 recorded expenses and 2019 forecast for Field Support
8 are presented in the table below. Also included is ORA’s 2019 forecast of \$19.718
9 million, which is \$1.351 million lower than SCG’s forecast of \$21.069 million.

10 **Table 11-18**
11 **Field Support Expenses**
12 **2012-2016 Recorded and 2019 Forecast**
13 **(In Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Field Support	\$21,545	\$20,791	\$21,247	\$19,916	\$19,402	\$21,069	\$19,821

14 Source: Ex. SCG-04-R, WP, p. 83.

15 **1. Overview of SCG’s Request**

16 For 2019, SCG requests \$21.069 million, an increase of \$1.667 million above
17 the 2016 recorded amount of \$19.402 million.⁹⁹ SCG’s forecast is based on a 5-
18 year average base, which results in an increase of \$1.178 million, plus incremental
19 expenses of \$1.075 million for: (1) additional office instructors, and field operations
20 supervisors, and (2) hydraulic valve maintenance and to address Hydrogen Sulfide
21 exposure.¹⁰⁰ The SCG forecast also includes a net savings of \$586,000 for Fueling
22 our Future.¹⁰¹

⁹⁸ Ex. SCG-04-R, p. GOM-63.

⁹⁹ Id.

¹⁰⁰ Ex. SCG-04-R, pp. GOM-66 and GOM-67.

¹⁰¹ Ex. SCG-04-R, p. GOM-67.

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2. ORA’s Analysis

ORA recommends \$19.229 million as the base year amount, plus an increase of \$1.178 million in incremental expenses, and a credit of \$586,000 for FOF. For 2019, ORA recommends \$19.821 million in expenses for Field Support. ORA’s recommendation is \$1.248 million lower than SCG’s request of \$21.069 million.

a. Base Amount

ORA disputes SCG’s use of the 5-year (2012-2016) average to determine the base amount. The 3-year period, from 2014 to 2016, shows a downward trend. In accordance with Commission guidelines,¹⁰² the more appropriate method would be to use the LRY as the base amount because the recorded expenses for this account have shown a downward trend over three or more years. As such, the LRY of \$19.402 million should be used.

SCG recently provided its 2017 recorded expenses for O&M, which includes Field Support. Given the 2017 expense amount of \$19.055 million, ORA recommends a base forecast blending the LRY 2016 expense with the 2017 recorded expenses. This is reasonable because the ORA base incorporates SCG’s LRY in testimony and also reflects the most recent expenses incurred. The 2-year average of 2016 and 2017 recorded expense amount, \$19.229 million, should be adopted because it is comparable to expenses recorded annually for 2015-2017.

b. Additional FTEs

SCG requests \$1.075 million in incremental expenses for the following categories: (1) Office Instructors, (2) Field Operations Supervisors, (3) Hydraulic Valve Maintenance, and (4) Confined Space Air Monitoring System for Field Personnel.¹⁰³ ORA does not dispute SCG’s request for additional FTEs.

¹⁰² D.89-12-057, p. 15.
¹⁰³ Ex. SCG-04-R, pp. GOM-66 to -67.

1 **c. Fueling Our Future Savings**

2 SCG proposes a savings of \$586,000 for Field Support based on the utility's
3 Fueling Our Future effort.¹⁰⁴ ORA does not take issue with the proposed savings.

4 **H. Tools, Fittings, and Materials**

5 The Tools, Fittings, and Materials workgroup purchases small tools, small
6 pipe fittings, miscellaneous pipeline materials, and miscellaneous installation
7 materials used during construction and maintenance activities and for inventory
8 stock.¹⁰⁵

9 SCG requests \$10.307 million in expenses for TY 2019.¹⁰⁶ The 2012-2016
10 recorded and 2019 forecasts for Tools Fittings and Materials are presented in the
11 table below. Also included is ORA's 2019 recommendation.

12 **Table 11-19**
13 **Tools Fittings & Materials Expenses**
14 **2012-2016 Recorded and 2019 Forecast**
15 **(In Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Tools Fittings & Mat.	\$8,218	\$8,068	\$8,426	\$9,157	\$8,601	\$10,307	\$9,275

16 Source: SCG-04-R-WP, p. 109.

17 **1. Overview of SCG's Request**

18 SCG requests \$10.307 million, an increase of \$1.706 million above the 2016
19 recorded amount of \$8.601 million.¹⁰⁷ SCG's forecast is based on a five-year
20 (2012-2016) historical linear trend, which results in \$820,000 increase above the
21 base year level. SCG requests an incremental expense of \$886,000 above the base
22 year to build up stocks and to maintain certain MSA and meter guard activities.¹⁰⁸

¹⁰⁴ Ex. SCG-04-R, p. GOM-67.

¹⁰⁵ Ex. SCG-04-R, p. GOM-69.

¹⁰⁶ Ex. SCG-04-R, WP, p. 109.

¹⁰⁷ Id. at p. GOM-70.

¹⁰⁸ Ex. SCG-04-R, pp. GOM-71 to 72.

1 **2. ORA’s Analysis**

2 ORA disputes SCG’s methodology and recommends \$9.275 million as the
3 2019 forecast instead. This amount is \$1.032 million lower than SCG’s forecast of
4 \$10.307 million. ORA’s recommendation is based on using the 5-year (2013-2017)
5 average of recorded expenses, which is \$8.519 million, as the base year, plus an
6 incremental increase of \$756,000, for a total of \$9.275 million for 2019.

7 **a. Base Amount**

8 ORA recommends using the most recent 5-year (2013-2017) average of
9 recorded expenses as the base forecast for 2019. ORA recommends \$8.519 million
10 as the base forecast using this method. ORA’s method is more appropriate
11 compared to SCG’s trending because the annual expenses of this account fluctuate
12 from year to year, and there is no specific trend. The Commission’s principles for
13 developing a base estimate states that using an average of expenses over a period
14 of time is reasonable when expenses fluctuate.¹⁰⁹

15 **b. Additional Expenses for Tools and**
16 **Maintenance Activities**

17 ORA disputes SCG’s request of \$130,000 for Meter Guard maintenance Non-
18 Labor costs. SCG requests this expense (non-labor only) to “...address an
19 increased amount of meter guard orders regenerated by the MSA Inspection
20 program...”¹¹⁰ The Labor expenses are addressed in the Service Maintenance
21 section earlier in this testimony. (See Section II. F. Because ORA disputes SCG’s
22 2019 forecast for Meter Guard Activities, which consists of the labor expenses for
23 Meter Guard Activities, as described in Section II.F above, the disallowance of the
24 Non-Labor costs are consistent with ORA’s earlier recommendation.

25 ORA recommends an incremental increase of \$756,000, which is SCG’s
26 request of \$886,000, minus the \$130,000 for meter guard maintenance Non-Labor
27 costs.

¹⁰⁹ D.89-12-057, p. 15.

¹¹⁰ Ex. SCG-04-R, p. GOM-71.

1 **II. ASSET MANAGEMENT**

2 According to SCG, the work activities tracked in this expense category are for
3 the evaluation of its distribution system. The activities are as follows: (1)
4 maintaining asset records, (2) identifying of corrective maintenance solutions, and
5 (3) coordinating with field personnel on completion and recording of O&M
6 activities.¹¹¹

7 **A. Overview of SCG’s Request**

8 For 2019, SCG requests \$6.965 million in expenses for Asset
9 Management.¹¹² This amount is \$1.206 million lower than the 2016 recorded
10 expenses of \$8.171 million. According to SCG, the reason for the reduction is due
11 to FOF savings forecasted for 2019.

12 **B. ORA’s Analysis**

13 SCG’s expenses for Asset Management appear to be stabilized for the 5-year
14 historical period as can be seen in the table below. Due to the forecasted FOF
15 savings, the forecast for 2019 is lower than the base year expenses. As such, ORA
16 does not take issue with SCG’s 2019 request of \$6.965 million for Asset
17 Management.

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Table 11-20
Asset Management Expenses
2012-2016 Recorded and 2019 Forecast
(In Thousands of 2016 Dollars)

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Asset Management	\$8,098	\$8,201	\$9,494	\$8,276	\$8,171	\$6,965	\$6,965

23 Source: 2012-2016 data from Ex. SCG-04-R, WP, p. 119. SCG 2019 forecast from Ex. SCG-04-R,
24 p. GOM-73, Table GOM-27.

¹¹¹ Ex. SCG-04-R, p. GOM-72.

¹¹² Ex. SCG-04-R, p. GOM-73.

1 **III. OPERATIONS AND MANAGEMENT**

2 According to SCG, the Operations Management work group is responsible for
3 the managing the integrity of the pipeline system to prevent and reduce risks, and to
4 provide safe and reliable service to customers.¹¹³ This group comprises two
5 categories: (1) Operations Leadership, and (2) Field Management. The Operations
6 Leadership group is responsible for communicating and reinforcing the objective of
7 providing safe and reliable service to customers. The Field Management group is
8 responsible for overall management of the workforce dedicated to the maintenance
9 and installation of Gas Distribution pipelines.¹¹⁴ The SCG five year (2012-2016)
10 recorded and 2019 forecast for Operations and Management expenses are
11 presented in the table below. ORA’s 2019 forecast is also included in the table for
12 comparison purposes.

13 **Table 11-21**
14 **Operations and Management and Training Expenses**
15 **2012-2016 Recorded and 2019 Forecast**
16 **(In Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Operations & Mgmt.	\$4,177	\$4,594	\$4,500	\$5,147	\$5,645	\$7,377	\$5,419

17 Source: 2012-2016 data from Ex. SCG-04-R, WP, p. 129.. SCG 2019 forecast from Ex. SCG-04-R,
18 p. GOM-77, Table GOM-29.

19 **A. Overview of SCG’s Request**

20 SCG requests \$7.377 million in expenses for Operations and Management for
21 2019.¹¹⁵ The SCG base forecast is determined by trending the five-year (2012-
22 2016) recorded expenses. Added to this base level, SCG requests \$821,000 for the
23 following incremental expenses: (1) \$298,000 for 3 project advisors, (2) \$101,000
24 for 1 project manager, (3) \$185,000 for 1 director of workforce planning and

¹¹³ Ex. SCG-04-R, p. GOM-77.

¹¹⁴ Ex. SCG-04-R, p. GOM-78.

¹¹⁵ Ex. SCG-04-R, p. GOM-77.

1 resource Management, (4) \$125,000 for one continuous improvement and
2 operations manager, and (5) \$112,000 for the resumption of employees previously
3 assigned to support the Aliso Canyon Incident.¹¹⁶

4 **B. ORA's Analysis**

5 ORA recommends \$5.419 million for 2019, which is \$1.958 million lower than
6 SCG's forecast of \$7.377 million. ORA's recommendation is comparable to the base
7 year amount. ORA's recommendation is determined by using a different method to
8 determine the base year. SCG's request for additional incremental funding should
9 be rejected because the utility hired the total number of employees forecasted for
10 2019 by the end of 2017.

11 **1. Base Amount**

12 ORA disputes SCG's forecast for 2019 because its use of a trend is not
13 appropriate. Instead of trending, ORA recommends using the blended recorded
14 expenses of the LRY 2016 and 2017 to determine the base year. Using the LRY
15 expense as the base year is appropriate because the 3 year (2014-2016) recorded
16 expenses show an upward trend. Per Commission guidance, when recorded
17 expenses in an account have shown a trend in a certain direction over three or more
18 years, the LRY level is an appropriate base estimate for the Test Year.

19 ORA recommends a forecast using a blend of the two most recent years'
20 recorded expenses. This is reasonable because it combines SCG's base year/LRY
21 as shown in its testimony, and the 2017 recorded expenses the company recently
22 provided. The blended LRY amount is, \$5.419 million, and is made up of the
23 average of \$5.645 million recorded for 2016 and \$5.193 million recorded for 2017.

24 **2. SCG's Incremental Request of \$821,000 for** 25 **Additional FTEs**

26 SCG's request of \$821,000 for 8 additional FTEs should be rejected because
27 the utility has hired the total number of employees forecasted for 2019 by the end of

¹¹⁶ Ex. SCG-04-R, pp. GOM-79 to GOM-80.

1 2017. The salaries of these 8 employees are captured in the 2017 recorded
2 expenses.

3 In a response to a data request, SCG states that as of November 2017, the
4 company had hired 8 new FTEs.¹¹⁷ These new FTEs, whose job descriptions are
5 outlined in SCG’s testimony, are being requested for 2019.¹¹⁸

6 Since SCG spent \$5.193 million in 2017, and has completed the hiring of
7 forecasted positions, there is no need for additional funding for 2019. The 2017
8 expenses compare close to the 2016 embedded amount of \$5.645 million. There is
9 currently adequate funding for Operations and Management, and no incremental
10 funds are needed.

11 SCG’s existing funding is adequate for the number of employees it requests
12 in 2019, as the positions identified in testimony are not new. According to SCG,
13 “The work activities of the Workforce Planning & Resource Management [SCG
14 requests the addition of 1 FTE for 2019] are not newly created for this GRC
15 cycle...”¹¹⁹ SCG also states that, “Between 2012-2016 these work activities were
16 managed by two separate geographic organizations...and were managed
17 independently...In 2017 these functions ...were consolidated in a centralized
18 organization...”¹²⁰

19 There is also embedded funding for the 3 additional FTEs SCG requests to
20 manage its leak inventory effort in 2019.¹²¹ According to SCG, for the period of
21 2012-2017, the utility has always had a leak inventory.¹²² SCG states that “From
22 2012-2016, a decentralized project management effort to mitigate leaks...SoCalGas

¹¹⁷ SCG’s response to data request ORA-53, Qs. 1-5.

¹¹⁸ Ex. SCG-04-R, pp. 79-80.

¹¹⁹ SCG’s response to data request ORA-085-DAO, Q. 2(a).

¹²⁰ SCG’s response to data request ORA-085-DA0, Q. 2(b).

¹²¹ Ex. SCG-04-R, p. GOM-79.

¹²² SCG’s response to data request ORA-85, Q. 1(b).

1 created a project management team in 2017, which centralized the leak inventory
2 reduction effort...”¹²³

3 SCG’s centralization effort in these instances allows the utility to use existing
4 embedded funding to hire the employees in 2017 instead of 2019. The employees
5 SCG requests for 2019 are already accounted for with embedded funding. SCG’s
6 request for an incremental \$821,000 in expenses should be rejected.

7 **IV. REGIONAL PUBLIC AFFAIRS**

8 The work activities of the Regional Public Affairs group consist of providing
9 support to field operations through its work with regional and local governments and
10 municipal districts on issues regarding permitting, proposed regulations, franchises,
11 and emergency preparedness and response.¹²⁴ The table below provides the SCG
12 five year (2012-2016) recorded expenses and 2019 forecast. ORA’s 2019 forecast
13 is also included for comparative purposes.

14 **Table 11-22**
15 **Regional Public Affairs Expenses**
16 **2012-2016 Recorded and 2019 Forecasts**
17 **(In Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Regional Public Affairs	\$4,717	\$4,282	\$4,108	\$4,009	\$3,460	\$4,420	\$4,420

18 Source: 2012-2016 data from Ex. SCG-04-R, WP, p. 148. SCG 2019 forecast from Ex. SCG-04-R,
19 p. GOM-79, Table GOM-30.

20 **A. Overview of SCG’s Request**

21 SCG requests \$4.420 million in expenses for 2019 for Regional Affairs.¹²⁵
22 This amount is \$960,000 above the 2016 recorded expense amount of \$3.460
23 million.

¹²³ SCG’s response to data request ORA-85, Q. 1(c).

¹²⁴ Ex. SCG-04-R, p. GOM-81.

¹²⁵ Ex. ORA-04-R, p. GOM-81.

1 **B. ORA's Analysis**

2 SCG's request is comparable to historical base year spending. ORA does not
3 take issue with SCG's request for 2019.

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1 **PART IV: GAS DISTRIBUTION CAPITAL EXPENDITURES**

2 **I. SUMMARY OF GAS DISTRIBUTION CAPITAL EXPENDITURES:**
3 **2012 – 2016**

4 According to SCG, the utility’s capital expenditures are investments in
5 infrastructure and support services to provide safe, clean, and reliable natural gas to
6 customer at reasonable rates.¹²⁸ SCG states the expenditures are for installations
7 of new pipeline mains, service lines, and MSAs. SCG also incurs costs for other
8 capital improvements such as pressure betterment, pipeline replacements,
9 installations and replacements of cathodic protection systems, and to purchase
10 equipment for pressure tracking and monitoring.¹²⁹

11 The table below provides the 5-year (2012-2016) recorded expenditures for
12 each of the capital work categories.
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¹²⁸ Ex. ORA-4-R, p. GOM-91,

¹²⁹ Ex. ORA-04-R, p. GOM-91

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**Table 11-24
Gas Distribution
Recorded 2012-2016 Capital Expenditures
(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
New Business	\$15,956	\$24,469	\$30,425	\$37,294	\$43,233
Pressure Betterment	\$12,728	\$12,253	\$37,912	\$23,175	\$29,371
Supply Line Repl.	\$10,773	\$3,160	\$3,728	\$313	\$3,067
Main Replacements	\$37,614	\$44,021	\$28,272	\$26,367	\$32,282
Service Replacement	\$14,046	\$16,485	\$20,581	\$21,273	\$26,315
Main & Service Abandonments	\$3,425	\$4,029	\$4,973	\$6,209	\$8,663
Regulator Stations	\$4,665	\$7,172	\$6,398	\$7,422	\$8,635
Cathodic Protection	\$2,400	\$3,842	\$4,342	\$3,855	\$5,462
Pipeline Relocations – Freeway	\$8,926	\$10,191	\$10,234	\$3,282	\$6,551
Pipeline Relocations – Franchise	\$16,886	\$16,389	\$18,723	\$24,153	\$13,319
Other Dist. Capital and Meter Guards	\$687	\$381	\$384	\$256	\$358
Measurement & Regulation Devices	\$4,264	\$6,753	\$6,320	\$4,425	\$8,415
Capital Tools	\$2,100	\$2,341	\$735	\$4,227	\$9,665
Field Capital Support	\$38,359	\$43,757	\$48,736	\$58,974	\$66,610
Remote Meter Reading	\$0	\$745	\$1,468	\$5,835	\$4,665
Total	\$194,930	\$221,752	\$249,230	\$266,032	\$301,481

5 Source: 2012-2016 data from Ex. SCG-04-R, CWP, pp. 4-239.

6 **II. GAS DISTRIBUTION CAPITAL EXPENDITURES: 2017 – 2019**

7 For 2017, 2018, and 2019, SCG requests capital expenditures of \$278.473
8 million, \$324.801 million, and \$347.842 million, respectively.

9 **A. New Business**

10 New Business capital expenditures provide for changes and additions to
11 SCG’s existing gas distribution system to connect new residential, commercial, and
12 industrial customers.¹³⁰ For this work category, SCG’s requests for 2017-2019 are
13 presented in the table below. Also included are ORA’s forecasts for 2017-2019.

¹³⁰ Ex. SCG-04-R, p. GOM-93.

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**Table 11-25
New Business Construction
2017-2019 Capital Expenditure Forecasts
(In Thousands of 2016 Dollars)**

Description	ORA Recommended*			*SoCalGas Proposed ¹³¹		
	2017	2018	2019	2017	2018	2019
New Business	\$43,342	\$37,212	\$47,904	\$36,632	\$45,313	\$50,393

5 *New Business forecasts include forfeiture credits.

6 For a historical perspective, the table below provides the five-year recorded
7 expenditures for New Business.

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**Table 11-26
New Business Construction
2012-2016 Recorded Capital Expenditures
(In Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016
New Business	\$15,956	\$24,469	\$30,425	\$37,294	\$43,233

12 Source: Ex. SCG-04-R, WP, p. 4.

13 **1. Overview of SCG’s Request**

14 SCG requests \$36.632 million for 2017, \$45.313 million for 2018, and
15 \$50.393 million for 2019.¹³² The forecasts are based on the following components:
16 (a) New Business Construction, (b) Advanced Metering Infrastructure (AMI), (c) New
17 Business Trench Reimbursements, and (d) New Business Forfeitures.

18 **2. ORA’s Analysis**

19 ORA recommends \$43.342 million for 2017, which is based on taking the
20 2017 adjusted-recorded amount of New Business Construction expenditures,
21 \$51.443 million, less ORA’s forecast of New Business forfeitures of \$8.798 million,
22 plus SCG’s 2017 forecast of \$697,000 for Trench Reimbursements.

23 ORA recommends \$37.212 million for 2018. ORA’s forecast is based on the
24 SCG 2018 forecast of \$45.313 million for New Business Construction, plus the SCG

¹³¹ Ex. SCG-04-R, p. GOM-92, Table GOM-35.

¹³² Ex. SCG-04-R, p. GOM-93.

1 2018 forecast of \$697,000 for Trench Reimbursements, and the ORA recommended
2 New Business forfeitures amount of \$8.798 million.

3 For 2019, ORA recommends \$47.904 million for New Business. This amount
4 is based on applying the SCG 2019 forecast of \$54.534 million for New Business
5 Construction, plus \$1.471 million for Advanced Metering Infrastructure and the SCG
6 2019 forecast of \$697,000 for Trench Reimbursement costs, and the ORA
7 recommended 2019 New Business forfeitures credit amount of \$8.798 million.

8 **a. New Business Construction**

9 For New Business Construction expenditures, SCG's base forecasts are
10 \$42.244 million for 2017, \$50.925 million for 2018, and \$54.534 million for 2019. The
11 New Business Construction component of SCG's 2017-2019 request is based on
12 projected new meter sets added to the gas distribution system multiplied by the cost
13 per meter set.¹³³ The SCG proposed cost per meter set is based on a mix of work
14 to construct new main extensions and associated service laterals.¹³⁴ The number of
15 new meter set installations SCG proposes for 2017 is 39,807; 47,987 for 2018; and
16 51,388 for 2019. The SCG unit cost for each new meter estimated for 2017, 2018,
17 and 2019 (\$1,061.23 per meter) is based on the 3-year average (2014-2016) total
18 recorded costs and new meter set installations.

19 ORA does not take issue with the SCG proposed cost components for New
20 Business Construction for 2018 and 2019, which are \$50.925 million and \$54.534
21 million, respectively. ORA recommends adopting the 2017 recorded costs for New
22 Business Construction.

23 **b. Advanced Metering Infrastructure**

24 SCG requests \$1.471 million for 2019 to fund work activities it claims is
25 needed to accommodate anticipated customer growth and AMI unit
26 replacements.¹³⁵ SCG proposes to install 41 Data Collector Unit (DCUs) for

¹³³ Id.

¹³⁴ Id., p. GOM-94

¹³⁵ SCG does not request funding for years 2017 or 2018.

1 customer growth and to replace an additional 25 DCUs in order to collect and
2 transmit meter readings.¹³⁶

3 ORA does not take issue with SCG's request of \$1.471 million for Advanced
4 Metering Infrastructure activities for 2019.

5 **c. New Business Trench Reimbursements**

6 New Business Trench Reimbursements are funds that SCG credits new
7 customers who provide their own trench, in accordance with CPUC Rules 20 and
8 21.¹³⁷ For 2017, 2018, and 2019, SCG estimates that reimbursements will be
9 \$697,000 each year.¹³⁸ SCG's forecast is based on a five-year average (2012-
10 2016) of historical costs.

11 ORA does not take issue with SCG's New Business Trench Reimbursements
12 forecast of \$697,000 annually for 2017-2019.

13 **d. New Business Forfeitures**

14 New Business forfeitures are credits that a new business customer
15 reimburses to SCG for the cost of unused or underutilized facilities constructed at
16 their request.¹³⁹ SCG forecasts that it will receive credits of \$6.309 million per year
17 for 2017, 2018, and 2019.¹⁴⁰ SCG's forecast is based on the historical 5-year
18 (2012-2016) average forfeiture credits received.¹⁴¹

19 ORA disagrees with the methodology SCG uses to forecast forfeiture credits
20 for 2018 and 2019. SCG's forecast method, which uses an average of 2012-2016
21 recorded forfeitures for both Main and Stub and Service and Meter Set Assembly,
22 yields a lower overall credit amount for 2017-2019. ORA opposes this method and
23 instead, recommends applying the LRY forfeitures for Main and Stub and the five

¹³⁶ Ex. SCG-04-R, p. GOM-95.

¹³⁷ Ex. SCG-04-R, p. GOM-95.

¹³⁸ Id.

¹³⁹ Ex. SCG-04-R, p. GOM-95.

¹⁴⁰ Id., at p. GOM-96.

¹⁴¹ Ex. SCG-04-R-CWP, p. 15

1 year (2012-2016) average forfeitures for Service and Meter Set Assembly
 2 Forfeitures. ORA's recommendation yields a total credit amount of \$8.798 million,
 3 which consists of \$4.912 million for Main and Stub, and \$3.886 million for Service
 4 and Meter Set Assembly forfeitures. ORA's forfeitures forecast of \$8.798 million
 5 annually for 2018 and 2019 is \$2.489 million higher than SCG's forecast of \$6.309
 6 million for 2018 and 2019. ORA's analysis is discussed below.

7 According to SCG's workpapers, there are 2 separately tracked sources that
 8 make up the forfeiture credits: (1) the Main and Stub Forfeitures, and (2) the Service
 9 and Meter Set Assembly Forfeitures. The figure below identifies the 2012-2016
 10 credit forfeitures for Main and Stub and for Service and Meter Set Assembly.

11 **Figure II**
 12 **SCG's 2012-2016 Recorded New Business Forfeitures**
 13 **(In Thousands of Nominal Dollars)**

		Historical Direct Cost (Nominal Dollars of the Year)					5-Year Ave.	5-yr Average Forecast (NSE)		
		2012	2013	2014	2015	2016		2017	2018	2019
[(A)]/[(C)]	Main & Stub Forfeitures	-1,680	-1,223	-1,925	-2,374	-4,912	-2,423	-2,423	-2,423	-2,423
[(B)]/[(C)]	Service & Meter Set Assembly Forfeitures	-4,619	-4,291	-3,392	-2,671	-4,456	-3,886	-3,886	-3,886	-3,886
[(D)]+[(E)]	Total Direct	-6,299	-5,514	-5,317	-5,045	-9,368	-6,309	-6,309	-6,309	-6,309

14
 15 Source: Exhibit SCG-04-CWP, p. 15.

16 As seen in the table above, the Main and Stub forfeitures show an increasing
 17 trend for credits received during the 2013-2016 period. The use of a 5-year average
 18 to forecast the 2017-2019 credits is inappropriate. In this instance, the use of the
 19 LRY, 2016, credit amount of **-\$4.912 million** for Main and Stub would be more
 20 preferable. ORA does not oppose SCG's method of using the 5-year average for
 21 Service and Meter Set Assembly.

22 ORA recommends applying the LRY forfeitures for Main and Stub and the five
 23 year (2012-2016) average forfeitures for Service and Meter Set Assembly
 24 Forfeitures. ORA's recommendation yields a total credit amount of \$8.798 million,

1 which consists of \$4.912 million for Main and Stub, and \$3.886 million for Service
 2 and Meter Set Assembly forfeitures.

3 **B. Pressure Betterments**

4 Pressure Betterment expenditures are for projects to increase the capacity or
 5 pressure of pipeline systems in certain areas to meet load growth. The table below
 6 presents SCG’s 2017-2019 capital expenditures forecast.¹⁴² Also included are
 7 ORA’s recommendations for each of those years.

8 **Table 11-27**
 9 **Pressure Betterments**
 10 **2017-2019 Capital Expenditure Forecasts**
 11 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ¹⁴³		
	2017	2018	2019	2017	2018	2019
Pressure Betterments	\$24,241	\$23,088	\$23,088	\$23,088	\$23,088	\$23,088

12 For comparison purposes, the 2012-2016 recorded expenditures for Pressure
 13 Betterment projects are identified in the table below.

14 **Table 11-28**
 15 **Pressure Betterments**
 16 **Recorded 2012-2016 Capital Expenditures**
 17 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Pressure Betterment	\$12,728	\$12,253	\$37,912	\$23,175	\$29,371

18 Source: Ex. SCG-04-R, WP, p. 27.

19 **1. Overview of SCG’s Request**

20 SCG requests \$23.088 million for each year from 2017-2019.¹⁴⁴ The SCG
 21 forecasts are based on a five-year (2012-2016) average of recorded expenditures
 22 for Pressure Betterments.¹⁴⁵

¹⁴² Ex. ORA-04-R, p. GOM-79.

¹⁴³ Ex. SCG-04, p. GOM-96, Table GOM-37.

¹⁴⁴ Ex. ORA-04-R, p. GOM-97.

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2. ORA’s Analysis

ORA does not take issue with SCG’s request for Pressure Betterment expenditures for 2018-2019. ORA recommends adopting the 2017 recorded expenditures of \$24.241 million as the 2017 forecast.

C. Supply Line Replacements

Supply Line Replacements expenditures are for the replacements of high pressure distribution pipelines, known as supply lines.¹⁴⁶ Supply lines normally operate at pressures higher than 60 psi. According to SCG, the utility has approximately 3,700 miles of distribution supply line in its system.¹⁴⁷

For 2017-2019, SCG requests \$4.209 million for Supply Line replacements. ORA does not take issue with SCG’s request. The table below presents ORA’s and SCG’s forecasts.

**Table 11-29
Supply Line Replacements
2017-2019 Capital Expenditure Forecasts
(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ¹⁴⁸		
	2017	2018	2019	2017	2018	2019
Supply Line Replacements	\$1,833	\$4,209	\$4,209	\$4,209	\$4,209	\$4,209

17
18

(continued from previous page)

¹⁴⁵ Id., p. GOM-98.

¹⁴⁶ Ex. SCG-04-R, p. GOM-99.

¹⁴⁷ Id.

¹⁴⁸ Ex. SCG-04, p. GOM-98, Table GOM-38.

1 The 2012-2016 recorded expenditures for Supply Line Replacement are
2 identified in the table below.

3 **Table 11-30**
4 **Supply Line Replacements**
5 **Recorded 2012-2016 Capital Expenditures**
6 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Supply Line Replacements	\$10,773	\$3,160	\$3,728	\$313	\$3,067

7 Source: Ex. SCG-04-R, WP, p. 36.

8 **1. Overview of SCG’s Request**

9 For 2017, 2018, and 2019, SCG requests \$4.209 million each year for Supply
10 Line Replacements.¹⁴⁹ SCG’s forecasts are based on the five-year (2012-2016)
11 average of recorded expenditures.¹⁵⁰

12 **2. ORA’s Analysis**

13 SCG’s forecast method is appropriate for this work category because the
14 expenditures vary significantly from year to year. ORA does not take issue with
15 SCG’s forecasts for 2018 and 2019. For the 2017 forecast, ORA recommends
16 adopting the 2017 recorded amount of \$1.833 million.

17 **D. Main Replacements**

18 The Main Replacements work category track expenditures for the following
19 activities: (1) installing new mains to replace existing mains, (2) replacing service
20 lines associated with main replacements, (3) performing “tie-overs” to newly-installed
21 replacement main, (4) performing meter set re-builds associated with newly-installed
22 replacement main, and (5) completing main replacements in advance of public
23 infrastructure improvement projects.¹⁵¹

¹⁴⁹ Ex. ORA-04-R, p. GOM-99.

¹⁵⁰ Id., at p. GOM-100.

¹⁵¹ Ex. SCG-04-R, p. GOM-101.

1 SCG requests \$33.711 million each year for 2017-2019. ORA recommends
 2 adopting the 2017 recorded amount for Main Replacements. For 2018 and 2019,
 3 ORA does not dispute SCG’s request for \$33.711 million annually. The table below
 4 provides a comparison of ORA’s and SCG’s forecasts.

5 **Table 11-31**
 6 **Main Replacements**
 7 **2017-2019 Capital Expenditure Forecasts**
 8 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ¹⁵²		
	2017	2018	2019	2017	2018	2019
Main Replacements	\$35,738	\$33,711	\$33,711	\$33,711	\$33,711	\$33,711

9 For a comparison of SCG’s 2017-2019 forecasts with historical spending, the
 10 2012-2016 recorded expenditures for Main Replacements are identified in the table
 11 below.

12 **Table 11-32**
 13 **Main Replacements**
 14 **Recorded 2012-2016 Capital Expenditures**
 15 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Main Replacements	\$37,614	\$44,021	\$28,272	\$26,367	\$32,282

16 Source: Ex. SCG-04-R, WP, p. 45.

17 **1. Overview of SCG’s Request**

18 SCG requests \$33.711 million each year for 2017-2019. SCG’s forecast is
 19 based on the 5-year (2012-2016) average of labor and non-labor expenditures.¹⁵³

20 **2. ORA’s Analysis**

21 ORA does not take issue with SCG’s request of \$33.711 million each year for
 22 2018 and 2019. ORA recommends adopting the SCG 2017 recorded expenditures
 23 of \$35.738 million, instead of the utility’s forecast of \$33.711 million, for 2017.

¹⁵² Ex. SCG-04, p. GOM-100, Table GOM-39.

¹⁵³ Ex. SCG-04-R, p. GOM-101.

1 **E. Service Replacements**

2 Service Replacement expenditures are for capital improvements associated
3 with service replacements.¹⁵⁴ The work activities consist of replacing pipelines due
4 to leakage and corrosion. SCG claims a significant number of leaks are found on
5 steel services that are not under cathodic protection. According to SCG, service
6 replacements are a mitigation measure used when the utility determines that it would
7 be more prudent to replace instead of repair the service.¹⁵⁵

8 SCG requests \$28.538 million for 2017, \$31.470 million for 2018, and
9 \$34.403 million for 2019. ORA recommends adopting the 2017 recorded amount of
10 \$35.205 million, which is \$6.667 million higher than the SCG forecast. For 2018
11 ORA does not take issue with SCG’s request for \$31,470 million. For 2019, ORA
12 forecasts \$31.871 million for 2019, which is \$2.532 million lower than SCG’s request
13 of \$34.403 million. The ORA recommendations and SCG’s forecasts for 2017-2019
14 are presented in the table below.

15 **Table 11-33**
16 **Service Replacements**
17 **2017-2019 Capital Expenditure Forecasts**
18 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed¹⁵⁶		
	2017	2018	2019	2017	2018	2019
Service Replacements	\$35,205	\$31,470	\$31,871	\$28,538	\$31,470	\$34,403

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¹⁵⁴ Id., at p. GOM-104.

¹⁵⁵ Ex. ORA-04-R, p. GOM-104.

¹⁵⁶ Ex. SCG-04, p. GOM-103, Table GOM-40.

1 For a comparison of the SCG 2017-2019 forecasts to historical spending, the
2 five year recorded expenditures are identified in the table below.

3 **Table 11-34**
4 **Service Replacements**
5 **Recorded 2012-2016 Capital Expenditures**
6 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Service Replacements	\$14,046	\$16,485	\$20,581	\$21,273	\$26,315

7 Source: Ex. SCG-04-R, WP, p. 56.

8 **1. Overview of SCG's Request**

9 SCG requests \$28.523 million for 2017, \$31.470 million for 2018, and
10 \$34.403 million for 2019 for Service Replacements.¹⁵⁷ The SCG forecasts are
11 based on the five year (2012-2016) trend of recorded expenditures. According to
12 SCG, the increases are a result of the utility's effort to reduce the non-hazardous
13 leak inventory and aging infrastructure.¹⁵⁸

14 **2. ORA's Analysis**

15 The SCG five year (2012-2016) historical spending for Service Replacements
16 shows a steady increase in expenditures for the replacement of services. As per
17 Commission guidance from previous GRCs, when expenditures show a trend, it is
18 appropriate to use the LRY as the forecast for test year spending. SCG's application
19 of a linear trend as its forecast in this instance should be rejected.

20 In applying the Commission's guidance on developing test year forecasts,
21 typically ORA would recommend the use of the LRY, or 2016 recorded, to forecast
22 future spending in this instance as recorded expenditures clearly show an upward
23 trend. However, in this case ORA recommends a variation of the LRY method in
24 recognition that the 2017 Service Replacements spending was significantly higher
25 than the base year amount.

¹⁵⁷ Ex. ORA-04-R, p. GOM-104.

¹⁵⁸ Id., at p. GOM-105.

1 ORA does not dispute SCG’s 2018 forecast. ORA recommends using the
 2 two-year average of 2016 and 2017 recorded spending to forecast the 2019
 3 expenditures. This approach takes into account SCG’s 2017 recorded expenditures
 4 while still following the Commission’s guidance in developing future forecasts. The
 5 2016 is the LRY in the GRC while the 2017 spending shows SCG’s recent spending.

6 For 2017, ORA recommends adopting the 2017 recorded spending of
 7 \$35.2015 million. ORA does not dispute SCG’s forecast for 2018. As for 2019,
 8 ORA recommends \$31.871 million. ORA’s recommendation is significantly higher
 9 than SCG’s forecast for 2017 (\$28.538 million) .For 2019, ORA’s recommendation of
 10 \$31.871 million is \$2.532 million lower than SCG’s forecast of \$34.403 million.

11 **F. Main and Service Abandonments**

12 The expenditures for Main and Service Abandonments are for work activities
 13 to abandon distribution mains and services without installation of a replacement
 14 pipeline.¹⁵⁹ According to SCG, the abandonment of pipelines occurs when: (1) a
 15 city or the state requests the vacating and demolition of public property when there
 16 is no possibility of replacement (2) a customer cancels gas service due to building
 17 demolition, or (3) temporary service is terminated.¹⁶⁰

18 ORA’s recommendations and SCG’s 2017-2019 forecasts are presented in
 19 the table below.

20 **Table 11-35**
 21 **Main and Service Abandonments**
 22 **2017-2019 Capital Expenditure Forecasts**
 23 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ¹⁶¹		
	2017	2018	2019	2017	2018	2019
Main & Service Abandonments	\$9,312	\$8,988	\$8,988	\$9,256	\$10,522	\$11,787

¹⁵⁹ Ex. ORA-04-R, p. GOM-106.

¹⁶⁰ Ex. ORA-04-R, p. GOM-108.

¹⁶¹ Ex. SCG-04-R, p. GOM-105, Table GOM-41.

1 For a comparison of SCG's forecasts to historical spending, the 2012-2016
2 recorded expenditures are identified below.

3 **Table 11-36**
4 **Main and Service Abandonments**
5 **Recorded 2012-2016 Capital Expenditures**
6 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Main & Service Abandonments	\$3,425	\$4,029	\$4,973	\$6,209	\$8,663

7 Source: Ex. SCG-04-R, WP, p. 67.

8 **1. Overview of SCG's Request**

9 SCG used the five-year (2012-2016) average of recorded expenditures to
10 determine its 2017-2019 forecasts.¹⁶² In 2017, SCG recorded spending \$9.312
11 million on Main and Service Abandonments.

12 **2. ORA's Analysis**

13 For Main and Service Abandonments, ORA recommends using the LRY as
14 the forecast methodology for future spending. In this instance the Main and Service
15 Abandonments recorded expenditures for 2012-2016 clearly show an upward trend,
16 as shown in the table above. In applying the Commission's guidance on developing
17 test year forecasts, the use of the LRY, or 2016 recorded, would be the appropriate
18 method. However, in this case ORA recommends a variation of the LRY method in
19 recognition that the 2017 spending was higher than the base year amount.

20 For 2018 and 2019, ORA recommends using the two-year average of 2016
21 and 2017 recorded spending to forecast future expenditures. This approach takes
22 into account SCG's 2017 recorded expenditures while still following the
23 Commission's guidance in developing future forecasts. The 2016 is the LRY in the
24 GRC while the 2017 spending shows SCG's recent spending. The two year 2016
25 and 2017 average is \$8.988 million.

26

¹⁶² Ex. SCG-04-R, p. GOM 108.

1 ORA recommends \$9.312 million for 2017. For 2018 and 2019, ORA
 2 recommends \$8.988 million annually. ORA’s 2017 recommendation amount of
 3 \$9.312 million compares closely with SCG’s forecast of \$9.256 million. ORA’s 2018
 4 recommendation of \$8.988 million is \$1.534 million lower than SCG’s request of
 5 \$10.522 million. For 2019, ORA’s recommendation of \$8.988 million is \$2.799
 6 million lower than SCG’s request of \$11.787 million.

7 **G. Regulator Stations**

8 The SCG capital expenditures for Regulator Stations are for the upgrade,
 9 relocation, and replacement of regulator stations due to design obsolescence, active
 10 corrosion, deteriorating vaults or equipment, exposure to flooding, hazardous traffic
 11 conditions, or ergonomically unsafe.¹⁶³

12 SCG’s 2017-2019 forecasts, along with ORA’s recommendations, are
 13 presented in the table below.

14 **Table 11-37**
 15 **Regulator Stations**
 16 **2017-2019 Capital Expenditure Forecasts**
 17 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ¹⁶⁴		
	2017	2018	2019	2017	2018	2019
Regulator Stations	\$6,427	\$7,531	\$7,531	\$8,636	\$14,636	\$19,436

18 For a comparison of the forecasts to historical spending levels, the 2012-2016
 19 recorded expenditures are identified in the table below.

20

¹⁶³ Ex. SCG-04-R, pp. GOM-109-110.

¹⁶⁴ Ex. SCG-04-R, p. GOM-108, Table GOM-42.

Table 11-38
Gas Distribution
Recorded 2012-2016 Capital Expenditures
(In Thousands of Constant 2016 Dollars)

Description	2012	2013	2014	2015	2016
Regulator Stations	\$4,665	\$7,172	\$6,398	\$7,422	\$8,635

Source: Ex. SCG-04-R, WP, p. 76.

1. Overview of SCG’s Request

SCG’s 2017-2019 forecasts are determined using a base amount, which is the 2016 recorded expenditures, plus incremental expenditures to accelerate the replacement rate of older regulator stations.¹⁶⁵ SCG claims that, under the current replacement rate, 68% of the regulator stations in the system will be above the expected useful life of 35 years.¹⁶⁶ SCG requests \$6.000 million to accelerate the replacement of 8 stations in 2018 and \$10.800 million to replace 18 stations in 2019.¹⁶⁷

2. ORA’s Analysis

ORA recommends \$6.427 million for Regulator Stations for 2017. This amount is the SCG 2017 recorded amount, and is \$2.209 million lower than SCG’s forecast.¹⁶⁸ For 2018 and 2019, ORA recommends \$7.531million annually for Regulator Stations. ORA’s recommendation is based on using the average of the 2016 and 2017 recorded expenditures, and no funding for the incremental request to accelerate the replacement of regulator stations.

a. Base Amount

SCG proposes the 2016 recorded expenditures as the base amount for its 2017-2019 forecasts. This method is appropriate since recorded expenditures for Regulator Stations indicate an upward trend from 2014 to 2016, as can be seen in

¹⁶⁵ Ex. SCG-04-R, p. GOM-111.

¹⁶⁶ Id.

¹⁶⁷ Id.

¹⁶⁸ Exhibit ORA-01, Attachment 1.

1 the table above. ORA recommends using the two-year average of 2016 and 2017
2 recorded expenditures, \$7.531 million, as the forecasts for 2018 and 2019. ORA's
3 method incorporates the base year and most recent expenditures to develop the
4 forecast, and yields a more accurate forecast.

5 **b. Regulator Station Accelerated Replacement**

6 SCG requests additional funding above the base year in order to increase the
7 replacement of regulator stations that are beyond their 35-year average life
8 expectancy, as part of the Regulator Station Replacement Program.¹⁶⁹ For 2018,
9 SCG requests an incremental increase of \$6.000 million above the base year to
10 replace an additional 8 regulator stations.¹⁷⁰ For 2019, SCG requests an
11 incremental increase of \$10.800 million above the base year to replace an additional
12 18 regulator stations.

13 **i. SCG's Claim that 68% of its Regulators are**
14 **Beyond Expected Useful Life is Inaccurate**

15 SCG requests a total amount of \$16.8 million above the base year spending
16 for 2018 and 2019. SCG claims that it "...plans to accelerate the rate at which it
17 replaces regulator stations by replacing an incremental eight stations in 2018 and 18
18 in 2019 in addition to the base forecast."¹⁷¹ SCG's rationale for the proposed
19 acceleration is because "At the current replacement rate, 68% of the regulator
20 stations in the system will be above the expected useful life of 35 years."¹⁷²
21 Another reason SCG cites is that the incremental replacements will reduce the
22 number of outdated designs and reducing risk.¹⁷³

23 SCG data request responses contradict this statement. Currently only 40%
24 and not 68% of regulator stations are older than 35 years. The utility currently

¹⁶⁹ Ex. SCG-04-R, p. GOM-111.

¹⁷⁰ Ex. SCG-04-R, p. GOM-111.

¹⁷¹ Ex. SCG-04-R, p. GOM-11.

¹⁷² Id.

¹⁷³ Id.

1 operates a total of 1,975 regulator stations in its system, and 784 regulator stations
2 (or 40%) are older than 35 years.¹⁷⁴ The figure below provides a breakdown of
3 regulator stations by age group.

4 **Figure III**
5 **SCG Regulator Stations**

AGE	COUNT
0 - 10 Years	288
11 - 20 Years	302
21 - 30 years	454
31 - 35 Years	147
36 Years and Older	784
Grand Total	1,975

6

7 When SCG states that the 68% of regulators will exceed the expected useful
8 life, it appears that SCG did not factor in the “new” stations.¹⁷⁵ As regulator
9 stations are replaced, the number of 35 years and older stations should be reduced
10 accordingly. If SCG had factored in the new stations that replaced the older ones,
11 the number of regulator stations younger than 35 years would increase. The figure
12 below provides the number of regulator stations replaced with new ones from 2012-
13 2017.¹⁷⁶

14 **Figure IV**
15 **SCG Regulator Stations Replaced**

Year	Regulator Stations Replaced
2012	29
2013	27
2014	19
2015	20
2016	20
2017	17

16

17

¹⁷⁴ SCG’s response to data request ORA-SCG-062-DAO, Q. 1.

¹⁷⁵ SCG’s response to data request ORA-064-DAO, Q. 2.

¹⁷⁶ SCG’s response to data request ORA-SCG-062-DAO, Q. (2) (b).

1 SCG’s request to accelerate the replacement of regulator stations in 2018
 2 and 2019 is excessive. SCG proposes to increase the number of regulators
 3 replaced in 2016 by 40% by replacing an additional 8 regulator stations. For 2019,
 4 SCG proposes to replace an additional 18 regulators above the base year, or a 90%
 5 increase.

6 SCG claims the main reason the regulator replacements need to be
 7 accelerated because they will be above the expected useful life of 35 years.¹⁷⁷ Age
 8 alone does not determine the need to replace a regulator station as evident by the
 9 809 regulator stations which are 35 years and older in SCG’s territory.¹⁷⁸ With
 10 proper maintenance, regulator stations can last many more years beyond 35. There
 11 are currently 161 regulator stations between 40 and 44 years old, 188 regulator
 12 stations 45-49 years old, and 324 regulator stations 50 years and older.¹⁷⁹ The
 13 table below provides the number of regulator by age group.

14 **Table 11-39**
 15 **SCG Regulator Stations by Age**

Age (yr.)	Regulator Station Count
0-5	111
5-9	139
10-14	157
15-19	155
20-24	163
25-29	288
30-34	153
35-39	136
40-44	161
45-49	188
>50	324
Total	1,975

¹⁷⁷ Ex. SCG-04-R, p. GOM-111.

¹⁷⁸ SCG’s response to data request, ORA-SCG-064-DAO, Q. 1(a).

¹⁷⁹ Id.

1 ORA disagrees with SCG’s rationale to accelerate the replacement of
2 regulator stations because of age alone. SCG did not provide any evidence to
3 support its request for additional funding to address aging infrastructure. The
4 average age of regulator stations has been decreasing since 2012. In 2012, the
5 average age of the 1,972 regulator stations at the time, was 34 years. In 2013, the
6 average age was 33 years. In 2017, the average age was 32 years.¹⁸⁰

7 In addition to the age of regulators, SCG states, “Stations identified for
8 replacement contain one or more of the following risk factors and are prioritized
9 accordingly: design obsolescence, active corrosion, deteriorating vaults or
10 equipment, exposure to flooding, hazardous traffic conditions, or considered
11 ergonomically unsafe.”¹⁸¹

12 ORA asked SCG to provide the risk assessments performed on the regulator
13 stations replaced between 2012 and 2017, but SCG did not provide the requested
14 information. SCG response is as follows: “SoCalGas does not retain other records
15 or risk assessments previously performed.”¹⁸² SCG states, “Once a station is
16 replaced, SoCalGas does not keep documentation of the reason for the
17 replacement.”¹⁸³ ORA is puzzled by SCG’s practice of not keeping records
18 regarding its capital assets, and questions the validity of SCG’s request for regulator
19 replacement acceleration if SCG does not have support for the need to replace since
20 all supporting documents are discarded.

21 ORA opposes SCG’s incremental funding requests for 2018 and 2019. SCG
22 does not have adequate support for its request to accelerate the replacement of
23 regulator stations beyond the regular schedule. According to SCG, the utility’s

¹⁸⁰ SCG’s response to data request ORA-SCG-064-DAO, Q. 1(b).

¹⁸¹ Ex. SCG-04-R, WP, p. 76.

¹⁸² SCG’s response to data request ORA-SCG-062, Q. 2(d).

¹⁸³ SCG’s response to data request ORA-SCG-062, Q. 2(e).

1 operating and maintenance practices allow stations to exceed the average useful
 2 life.¹⁸⁴

3 **H. Cathodic Protection**

4 Cathodic Protection (CP) expenditures are for the new installation and
 5 replacement of CP systems and equipment.¹⁸⁵ CP is a method for mitigating
 6 external corrosion on steel pipelines. SCG states, “CP combats corrosion by
 7 imposing an electric current flow toward the surface of the pipeline, which means
 8 keeping the pipeline negatively charged (cathodic) with respect to the surrounding
 9 soil. This results in reduced corrosion on the pipeline system.”¹⁸⁶

10 **Table 11-40**
 11 **Cathodic Protection**
 12 **2017-2019 Capital Expenditure Forecasts**
 13 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ¹⁸⁷		
	2017	2018	2019	2017	2018	2019
Cathodic Protection	\$8,264	\$6,059	\$8,322	\$6,320	\$8,434	\$9,511

14 **1. Overview of SCG’s Request**

15 SCG requests \$6.320 million for 2017, \$8.434 million for 2018, and \$9.511
 16 million for 2019.¹⁸⁸ SCG’s forecast comprises a base amount, determined by a five-
 17 year (2012-2016) linear trend, plus incremental increases of \$499,000 in 2017,
 18 \$1.999 million in 2018, and \$2.462 million in 2019 for the replacement of outdated
 19 Remote Monitoring Units.¹⁸⁹

¹⁸⁴ SCG’s response to data request ORA-SCG-093-DAO, Q. 1(c).

¹⁸⁵ Ex. SCG-04-R, p. GOM-112.

¹⁸⁶ Ex. SCG-04-R, p. GOM-113.

¹⁸⁷ Ex. SCG-04-R, p. GOM-112, Table GOM-43.

¹⁸⁸ Ex. SCG-04-R, p. GOM-112.

¹⁸⁹ Ex. SCG-04-R, p. GOM-115.

1 The 2012-2016 recorded expenditures for Cathodic Protection are shown in
2 the table below.

3 **Table 11-41**
4 **Cathodic Protection**
5 **Recorded 2012-2016 Capital Expenditures**
6 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Cathodic Protection	\$2,400	\$3,842	\$4,342	\$3,855	\$5,462

7 Source: SCG-04-R, WP, p.91.

8 **2. ORA's Analysis**

9 ORA recommends using the 2017 recorded expenditures of \$8.264 million as
10 the 2017 forecast. For 2018, ORA recommends \$6.059 million. ORA recommends
11 \$8.322 million for 2019. ORA's recommendations are based on using a different
12 method to determine the base amount, resulting in a different forecast, plus SCG
13 incremental expenditures. ORA's 2018 recommendation is \$2.375 million lower than
14 SCG's request of \$8.434 million. ORA's 2019 recommendation is \$1.189 million
15 lower than SCG's request of \$9.511 million.

16 **a. Base Amount**

17 ORA takes issue with SCG's linear trend method to determine the base
18 amount. Instead of trending, ORA recommends using the 3-year (2015-2017)
19 average expenditures of Cathodic Protection as the base amount. ORA's method is
20 more appropriate because the expenditures of this work group fluctuate from year to
21 year, as can be seen in the table above. There is no clear trend up or down that
22 would warrant a different method. ORA recommends using the three-year average
23 method because this method normalizes the fluctuations and also reflects the most
24 recent CP spending. ORA recommends \$5.860 million as the base amount for 2018
25 and 2019.

26

1 **b. Remote Monitoring Units (RMUs)**

2 SCG requests an incremental increase of \$1.999 million for 2018 and \$2.462
3 million for 2019 to replace RMUs that are outdated.¹⁹⁰ ORA does not take issue
4 with SCG’s request of incremental expenditures for RMU replacements.

5 **I. Pipeline Relocations – Freeway**

6 The capital expenditures for Pipeline Relocations-Freeway are for the
7 relocation and alteration of SCG facilities in response to external requests, as
8 specified under the provisions of utility agreements with state and local agencies.¹⁹¹
9 According to SCG, Freeway work is driven by requests from governing agencies,
10 such as the California Department of Transportation (Caltrans).¹⁹²

11 The 2017-2019 SCG forecasts and ORA recommendations for Pipeline
12 Relocations-Freeway are presented in the table below.

13 **Table 11-42**
14 **Pipeline Relocations – Freeway**
15 **2017-2019 Capital Expenditure Forecasts**
16 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ¹⁹³		
	2017	2018	2019	2017	2018	2019
Pipeline Reloc - Fwy	\$1,402	\$3,745	\$3,745	\$7,837	\$7,837	\$7,837

17 **1. Overview of SCG’s Request**

18 SCG requests \$7.837 million each year for 2017, 2018, and 2019.¹⁹⁴ SCG’s
19 requests are based on the five-year (2012-2016) average historical expenditures for
20 this workgroup.

¹⁹⁰ Ex. ORA-04-R, p. GOM-115.

¹⁹¹ Ex. SCG-04-R, p. GOM-118.

¹⁹² Id.

¹⁹³ Ex. SCG-04, p. GOM-115, Table GOM-44.

¹⁹⁴ Ex. SCG-04-R, p. GOM-118.

1 The 2012-2016 recorded expenditures for Pipeline Relocations-Freeway is
2 shown in the table below.

3 **Table 11-43**
4 **Pipeline Relocations—Freeway**
5 **Recorded 2012-2016 Capital Expenditures**
6 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Pipeline Reloc.-Freeway	\$8,926	\$10,191	\$10,234	\$3,282	\$6,551

7 Source: SCG-04-R, WP, p. 106.

8 **2. ORA's Analysis**

9 ORA recommends adopting the 2017 recorded expenditures of \$1.402 million
10 as the 2017 forecast for Pipeline Relocations-Freeway, which is significantly lower
11 than the SCG 2017 forecast of \$7.837 million. As such, ORA has incorporated the
12 2017 expenditures into its 2018 and 2019 forecasts. SCG's recent spending
13 provides data points appropriate to include for a more accurate forecast. Instead of
14 the five year average method SCG proposed, ORA recommends using the three-
15 year (2015-2017) average method to determine the 2018 and 2019 forecasts.
16 ORA's recommendation results in a forecast of \$3.745 million. For 2018 and 2019,
17 ORA's recommendation is \$4.092 million lower than SCG's forecast of \$7.837
18 million.

19 **J. Pipeline Relocations – Franchise**

20 The capital expenditures for Pipeline Relocations—Franchise are for the
21 relocation or alteration of SCG's facilities in response to external requests, as
22 specified under the provisions of SCG's franchise agreements with city and county
23 agencies.¹⁹⁵ SCG states that the work activities of this work group are driven by
24 external agencies, such as cities, counties or the state, and it is difficult to predict an
25 accurate timeline for when franchise projects will be executed and SCG does not
26 have control over the construction schedules.¹⁹⁶

¹⁹⁵ Ex. SCG-04-R, p. 118.

¹⁹⁶ Ex. SCG-04-R, pp. GOM-118 to GOM-119.

1 The 2017-2019 SCG forecasts and ORA recommendations for this work
 2 group are presented in the table below.

3 **Table 11-44**
 4 **Pipeline Relocations – Franchise**
 5 **2017-2019 Capital Expenditure Forecasts**
 6 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ¹⁹⁷		
	2017	2018	2019	2017	2018	2019
Pipeline Reloc – Franchise	\$13,200	\$16,891	\$16,891	\$17,894	\$17,894	\$17,894

7 **1. Overview of SCG’s Request**

8 SCG requests \$17.894 million each year for 2017, 2018, and 2019.¹⁹⁸
 9 SCG’s forecasts are based on the five-year (2012-2016) historical expenditures of
 10 Pipeline Relocations-Franchise.

11 The 2012-2016 recorded expenditures for this workgroup is presented in the
 12 table below.

13 **Table 11-45**
 14 **Pipeline Relocations—Franchise**
 15 **Recorded 2012-2016 Capital Expenditures**
 16 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Pipeline Reloc.-Franchise	\$16,886	\$16,389	\$18,723	\$24,153	\$13,319

17 Source: Ex. SCG-04-R, WP, p. 118.

18 **2. ORA’s Analysis**

19 ORA recommends the 2017 recorded expenditures of \$13.200 million as the
 20 2017 forecast. ORA recommends using the three-year (2015-2017) average of
 21 recorded expenditures to forecast the 2018 and 2019 expenditures. While the five-
 22 year average method SCG proposes captures a longer time period compared to the
 23 ORA recommendation, the three-year average method reflects more recent

¹⁹⁷ Ex. SCG-04, p. GOM-117, Table GOM-45.

¹⁹⁸ Ex. SCG-04-R, p. GOM-120.

1 spending by SCG and captures the downward trend of expenditures in 2016 and
 2 2017. ORA’s method is more appropriate and should be adopted. ORA’s
 3 recommendation is \$16.891 million each year for 2018 and 2019, which is \$1.003
 4 million lower than SCG’s proposed forecast of \$17.894 million for 2018 and 2019.

5 **K. Other Distribution Capital Projects and Meter Guards**

6 Expenditures for Other Distribution Capital Projects cover expenditures for
 7 capital adjustments to SCG’s Distribution facilities not specifically included in the
 8 other Gas Distribution work categories and meter guard installations.¹⁹⁹ According
 9 to SCG, the work activities addressed by this group are generally unpredictable in
 10 nature because the vast majority of the costs are driven by property owners
 11 requesting SCG to move its facilities from their property.²⁰⁰

12 The 2017-2019 SCG forecasts and ORA recommendations are presented in
 13 the table below.

14 **Table 11-46**
 15 **Other Distribution Capital Projects & Meter Guards**
 16 **2017-2019 Capital Expenditure Forecasts**
 17 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ²⁰¹		
	2017	2018	2019	2017	2018	2019
Other Dist. Capital	\$5,162	\$3,297	\$3,297	\$3,297	\$3,297	\$3,297
Meter Guards	\$542	\$0	\$0	\$359	\$8,299	\$8,299
Total	\$5,704	\$3,297	\$3,297	\$3,656	\$11,596	\$11,596

18 **1. Overview of SCG’s Request**

19 SCG requests a total of \$3.656 million for 2017, \$11.596 million for 2018, and
 20 \$11.596 million for 2019.²⁰² SCG’s forecasts are based on a base amount of
 21 \$3.297 million plus incremental increases for the installation of new meter guards in

¹⁹⁹ Ex. SCG-04-R, p. GOM-121.

²⁰⁰ Id., at p. GOM-122.

²⁰¹ Ex. SCG-04, p. GOM-120, Table GOM-46.

²⁰² Ex. SCG-04-R, p. GOM-121.

1 the amounts of \$359,000 for 2017, \$8.299 million for 2018, and \$8.299 million for
2 2019.²⁰³

3 The 2012-2016 recorded expenditures for Other Distribution Capital are
4 shown in the table below.

5 **Table 11-47**
6 **Other Distribution Capital**
7 **Recorded 2012-2016 Capital Expenditures**
8 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Other Dist. Capital	\$3,088	\$4,079	\$2,216	\$2,674	\$4,424
Meter Guards	\$678	\$381	\$384	\$256	\$358
Total	\$3,766	\$4,460	\$2,600	\$2,930	\$4,782

9 Source: Ex. SCG-04-R, WP, p. 130.

10 **2. ORA's Analysis**

11 ORA recommends using the 2017 recorded expenditures, \$5.704 million as
12 the 2017 forecast. The ORA recommendation is \$2.048 million higher than the SCG
13 request of \$3.656 million.

14 ORA does not dispute SCG's method to determine the base amount of
15 \$3.297 million. For 2018 and 2019, ORA recommends \$3.297 million each year,
16 which is based on the SCG proposed base amount, and no incremental funding for
17 new meter guard installations.

18 **a. Base Amount**

19 SCG's base amount for this work category is based on the five-year (2012-
20 2016) average of historical expenditures.²⁰⁴ The SCG method yields a base
21 amount of \$3.297 million as the base amount for 2017-2019. ORA does not dispute
22 SCG's methodology or the base amount of its forecasts.

23

²⁰³ Id., at p. GOM-124.

²⁰⁴ Ex. SCG-04-R, p. GOM-123.

1 **b. Meter Guards**

2 SCG requests an additional \$8.299 million to install new meter guards at
3 13,000 meter set assembly (MSA) locations each year for 2018 and 2019.²⁰⁵
4 According to SCG, the installation of meter guards is needed to protect its gas
5 distribution assets and to comply with state and federal regulations. SCG forecasts
6 an increase in the number of meter guard orders as a result of increased MSA
7 inspections by Customer Services.²⁰⁶ SCG states that meter guards are installed to
8 protect the MSA when it is apparent that activity on the property creates or
9 encourages a potentially hazardous environment to the MSA.²⁰⁷

10 SCG claims that in 2016, it created the MSA Inspection team which
11 discovered a significant inventory of MSA locations requiring follow up work by gas
12 distribution.²⁰⁸ SCG claims that it began to develop a plan in 2017 with the goal of
13 implementing this plan in 2018. However, as of January 19, 2018, SCG is still
14 developing this plan.²⁰⁹ SCG's forecast is ambitious and ORA is not confident that
15 13,000 meter guards, or any meter guards from this plan, will be installed by the end
16 of 2018.

17 SCG claims that the plan is designed to comply with PHMSA Title 49, Subpart
18 H, 192.353 (a).²¹⁰ In general, state and federal regulations require gas piping to be
19 protected from physical damage, including impact from vehicles. In addition, Title
20 49, Subpart H, 192.917(a) (3) (DIMP) refers to the protection of gas systems from
21 damage by outside forces.

22 SCG's claim that it must comply with federal regulations by developing and
23 implementing a meter guard installation plan is unsubstantiated. The federal

²⁰⁵ Ex. SCG-04-R, p. GOM-125.

²⁰⁶ Ex. SCG-04-R, p. GOM-125.

²⁰⁷ Id.

²⁰⁸ SCG's response to data request ORA-SCG-065-DAO, Q. 8(c).

²⁰⁹ SCG's response to data request ORA-SCG-065-DAO, Q. 8(e).

²¹⁰ Ex. SCG-04-R, p. GOM-124.

1 regulation SCG cites, PHMSA Title 49, Subpart H, 192.353 (a), is not new. This
2 regulation first took effect on August 19, 1970, and was later amended on July 13,
3 1998, and September 15, 2003. PHMSA Title 49, Subpart H, 192.353 (a) states the
4 following:

5 *Each meter and service regulator, whether inside or outside a building,*
6 *must be installed in a readily accessible location and be protected from*
7 *corrosion and other damage, including, if installed outside a building,*
8 *vehicular damage that may be anticipated...*

9 As for SCG's claim that it must be in compliance with Title 49, Subpart H,
10 192.917(a)(3) (DIMP) for the protection of gas systems from damage by outside
11 forces, the utility is requesting DIMP funding as part of its Gas Infrastructure
12 Protection Project. There is no need to consider this federal regulation when
13 considering SCG's request for funding to install new meter guards herein.

14 SCG claims during 2016 and 2017, the MSA Inspection Team identified
15 approximately 125,000 locations where a meter guard or other means of meter
16 protection may be required.²¹¹ SCG states its goal is to reduce its current inventory
17 starting with 13,000 orders in 2018 and to continue at this rate until it reduces its
18 inventory.²¹² However, as previously stated SCG is still developing its plan and
19 program to address this issue.

20 ORA does not dispute new meter guard installations due to changes to the
21 MSA location or environment, and unforeseen by SCG at the time of MSA
22 installation. However, SCG is not able to provide the details for the 13,000 MSA
23 locations proposed for 2018 or the 13,000 MSA locations proposed for 2019. SCG's
24 reasoning is that it has an inventory that it plans to reduce over the next 10 years.²¹³
25 SCG's 2018 and 2019 proposals are excessive compared to the historical number of
26 new meter guard installations from 2012-2017, shown in the table below.

²¹¹ SCG's response to data request ORA-SCG-065-DAO, Q. 7.

²¹² Id.

²¹³ SCG's response to data request ORA-SCG-065-DAO, Q. 7.

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**Table 11-48
New Meter Guard Units Installed (2012-2017)**

	2012	2013	2014	2015	2016	2017
Meter Guards	2,041	1,092	785	710	835	834

3 Source: SCG’s response to data request ORA-SCG-065-DAO, Q. 9(c).

4 SCG’s request for an additional \$8.299 million each year for 2018 and 2019
5 should be rejected because it is excessive inadequately supported, and the utility
6 has not developed its plan and program to address this issue.

7 ORA recommends no incremental funding for 2018 and 2019 compared to
8 SCG’s request of \$8.299 million each year.

9 **L. Measurement and Regulation Devices**

10 The expenditures of Measurement and Regulation Devices are for the
11 purchase of gas meters, regulators, electronic gas pressure and temperature
12 correction equipment, and electronic pressure monitors. ²¹⁴

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**Table 11-49
Measurement and Regulation Devices
2017-2019 Capital Expenditure Forecasts
(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed²¹⁵		
	2017	2018	2019	2017	2018	2019
Meters	\$13,559	\$22,206	\$29,838	\$16,290	\$22,206	\$29,838
Regulators	\$3,157	\$4,963	\$5,128	\$3,733	\$4,963	\$5,128
Gas Energy Measurement Systems	\$911	\$1,470	\$1,494	\$1,415	\$1,470	\$1,494
Electronic Pressure Monitors	\$743	\$909	\$577	\$829	\$909	\$577
Total	\$18,370	\$29,547	\$37,037	\$22,266	\$29,547	\$37,037

²¹⁴ Ex. SCG-04-R, p. GOM-126.

²¹⁵ Ex. SCG-04, p. GOM-125, Table GOM-49.

1 **1. Overview of SCG’s Request**

2 For Meters, SCG requests \$16.290 million for the purchase of meters in 2017,
3 \$22.206 million in 2018, and \$29.838 million in 2019.²¹⁶ SCG’s forecasts are based
4 on the projected customer growth and forecasted meter replacements and the
5 historical cost per meter type.

6 For Regulators, SCG requests \$3.733 million for 2017, \$4.962 million for
7 2018, and \$5.128 million for 2019. SCG’s forecasts are based on a ratio of
8 purchased regulator to purchased meter from the 2009 to 2013 period,²¹⁷ and
9 applying this ratio to the projected number of meter set purchases.

10 SCG requests \$829,000 for 2017, \$909,000 for 2018, and \$577,000 for 2019
11 to purchase 350 additional electronic pressure monitors (EPMs). SCG’s forecasts
12 are based on using the 2016 recorded expenditures plus incremental costs. SCG
13 requests \$252,000 each year for 2017 and 2018 to install the 350 EPMs to attain
14 proper communication with the new AMI system. SCG’s forecast is based on the
15 EPMs’ purchase request above.

16 The 2012-2016 recorded expenditures for Measurement and Regulation
17 (M&R) Devices are shown below.

18

²¹⁶ Ex. SCG-04-R, p. GOM-128.

²¹⁷ SCG states it chooses not to use data from the 2012-2016 period because of the need to purchase meters at a higher rate due to AMI project deployment. The ratio during this period would be inaccurate and would yield a lower ratio. See Ex. SCG-04-R, p. GOM-130.

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Table 11-50
Measurement and Regulation
Recorded 2012-2016 Capital Expenditures
(In Thousands of Constant 2016 Dollars)

Description	2012	2013	2014	2015	2016
Meters	\$16,254	\$18,784	\$20,956	\$33,405	\$27,685
Regulators	\$4,264	\$6,753	\$6,320	\$4,425	\$8,415
Gas Energy Measurement Systems	\$1,435	\$1,133	\$1,054	\$1,157	\$1,059
Electronic Pressure Monitors	\$708	\$1,050	\$1,220	\$1,138	\$577
Total	\$22,661	\$27,720	\$29,550	\$40,125	\$37,736

5 Source: Ex. SCG-04-R, WP, p. 178.

6 **2. ORA's Analysis**

7 For 2017, SCG requests a total of \$22.266 million in expenditures for the
8 M&R category. In 2017, SCG spent a total of \$18.370 million for M&R. ORA
9 recommends using the 2017 recorded expenditures for the 2017 forecast because
10 this is the most recent spending for this category. The ORA 2017 recommendation
11 of \$18.370 million is \$3.896 million lower than SCG's request of \$22.266 million.

12 ORA does not take issue with SCG's request for \$29.547 million for 2018 and
13 37.037 million for 2019. SCG's requests are comparable to recent historical
14 expenditures.

15 **M. Capital Tools**

16 Capital Tools expenditures are for the replacement of existing tools that are
17 damaged, broken, outdated technologically, or have outlived their useful lives and to
18 stock new tools necessary to complete the maintenance and repair of SCG's
19 facilities.²¹⁸

20

²¹⁸ Ex. SCG-04-R, p. GOM-135.

1 The 2017-2019 SCG forecasts and ORA recommendations for Capital Tools
2 are presented in the table below.

3 **Table 11-51**
4 **Capital Tools**
5 **2017-2019 Capital Expenditure Forecasts**
6 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ²¹⁹		
	2017	2018	2019	2017	2018	2019
Total	\$9,510	\$10,688	\$9,588	\$14,386	\$14,220	\$12,322

7 **1. Overview of SCG’s Request**

8 SCG requests \$14.386 million for 2017, \$14.220 million for 2018, and
9 \$12.322 million for 2019.²²⁰ According to SCG, the utility expects tool purchases to
10 continue on an increasing trend as the level of construction and maintenance
11 activities increases.²²¹ For the 2017-2019 forecasts, SCG used the five-year (2012-
12 2016) trend to determine a base forecast. To this base, SCG requests additional
13 increases of \$3.800 million in 2017 and \$2.500 in 2018 to standardize Locate and
14 Mark tools.²²² Additionally, SCG requests an increase of \$1.667 million to upgrade
15 Nomex coveralls and fresh air equipment,²²³ and \$1.100 million for 2018 to replace
16 the current confined space and hydrogen sulfite, or H2S, monitoring equipment
17 system-wide.²²⁴

²¹⁹ Ex. SCG-04, p. GOM-134, Table GOM-54.

²²⁰ Ex. SCG-04-R, p. GOM-135.

²²¹ Id.

²²² Ex. SCG-04-R, p. GOM-136.

²²³ Ex. SCG-04-R, p. GOM-137.

²²⁴ Id.

1 The 2012-2016 recorded expenditures for Capital Tools is presented below.

2 **Table 11-52**
3 **Capital Tools**
4 **Recorded 2012-2016 Capital Expenditures**
5 **(In Thousands of Constant 2016 Dollars)**

Description	2012	2013	2014	2015	2016
Capital Tolls	\$2,100	\$2,341	\$735	\$4,227	\$9,665

6 Source: Ex. SCG-04-R-WP, p. 201.

7 **2. ORA's Analysis**

8 ORA disputes SCG's use of trending to forecast the base amount. ORA also
9 takes issue with SCG's forecasts for 2017 and 2018. ORA recommends using the
10 2017 recorded expenditures of \$9.510 million as the 2017 forecast. ORA
11 recommends \$10.688 million, which consists of \$9.588 million for the base amount,
12 plus \$1.100 million for the replacement of confined space and H2S monitoring
13 equipment, for 2018, and \$9.588 million for 2019.

14 **a. Base Amount**

15 SCG uses the five-year (2012-2016) trend to develop the base amount for
16 2017 to 2019.²²⁵ This method results in a decrease of \$746,000 for 2017, and
17 increases of \$955,000 for 2018 and \$2.657 million for 2019.²²⁶ ORA disputes
18 SCG's method and recommends using the LRY (2016) expense as the base
19 amount.

20 According to the many Commission decisions regarding the principles of
21 forecast methodologies, such as decisions D.89-12-057 and D.15-11-021, as
22 excerpted in Section I above, if recorded expenses in an account have shown a
23 trend in a certain direction over three or more years, the LRY is an appropriate base
24 estimate. The recorded expenses show a steady downward trend from 2014 to
25 2016, as shown in the table above.

²²⁵ Ex. SCG-04-R, p. GOM-136.

²²⁶ Ex. SCG-04-R, p. GOM-136.

1 SCG recently provided the 2017 recorded expenses for capital expenditures.
2 The 2017 recorded expenditures for Capital Tools is \$9.510 million. ORA
3 recommends using the two-year average of 2016 and 2017 recorded expenses as
4 the base amount for 2018 and 2019. This method would be in line with Commission
5 guidance, and would also reflect the most recent expenditures for Capital Tools.
6 The ORA recommended amount using the two-year average of 2016 and 2017
7 expenses is \$9.588 million. The ORA forecast of \$9.588 million is \$1.023 million
8 lower than SCG's proposed base amount of \$10.620 million for 2018. The ORA
9 forecast of \$9.588 million for 2019 is \$2.734 million lower than SCG's forecast of
10 \$12.322 million for 2019.

11 **b. SCG's Proposed Incremental Expenditures**

12 SCG requests an additional \$1.100 million to replace the current confined
13 space and H2S monitoring equipment system-wide to address age-related
14 equipment failures that currently present a potential risk to the safety of employees
15 working in gaseous atmospheres.²²⁷ ORA does not take issue with this SCG
16 request of \$1.100 million.

17 SCG requests \$2.500 million in 2018 to standardize locate and mark tools.
18 This funding request is a continuation of SCG's effort to standardize Locate and
19 Mark tools in 2017.²²⁸ For 2017, SCG requests \$3.800 million.

20 SCG should not be authorized any funding for 2018 to standardize Locate
21 and Mark tools. ORA's recommended base amount forecast of \$9.588 million for
22 2018 is adequate to standardize Locate and Mark tools. The ORA forecast is higher
23 than the 2017 recorded expenditures of \$9.510 million for Capital Tools, which
24 provides for the \$3.800 million SCG had proposed for 2017. SCG has not offered
25 additional support to assure the Commission that more work would be performed in
26 2018 compared to 2017. ORA recommends no incremental funding for SCG's
27 request regarding Locate and Mark tools.

²²⁷ Ex. SCG-04-R, p. GOM-136.

²²⁸ Ex. SCG-04-R, p. GOM-136.

1 **N. Field Capital Support**

2 Field Capital Support expenditures include work activities such as project
3 planning, local engineering, clerical support and field dispatch, field Management
4 and supervision, updating of mapping products, and off-production time for support
5 personnel and field crews that install Gas Distribution capital assets.²²⁹

6 SCG’s request and ORA’s recommendation for Field Capital Support from
7 2017-2019 are presented in the table below.

8 **Table 11-53**
9 **Field Capital Support**
10 **2017-2019 Capital Expenditure Forecasts**
11 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ²³⁰		
	2017	2018	2019	2017	2018	2019
Field Capital Support	\$65,384	\$57,749	\$61,985	\$61,317	\$70,292	\$74,618

12 **1. Overview of SCG’s Request**

13 The Field Capital Support expenditures are tied to the level of capital
14 construction activity. SCG states, the greater the volume of construction activity, the
15 more support is needed leading to larger support costs.²³¹ SCG’s forecast is based
16 on the premise that the level of Field Capital Support expenditures is a percentage
17 of construction costs incurred. According to SCG, from 2012-2016, the percentage
18 has ranged from 29% to 37%.²³² For the 2017-2019 period, SCG uses the five-year
19 (2012-2016) average support ratio of 32.7% to determine the base forecast for the
20 Field Capital Support work category.²³³

²²⁹ Ex. SCG-04-R, p. GOM-138.

²³⁰ Ex. SCG-04, p. GOM-137, Table GOM-55.

²³¹ Ex. SCG-04-R, p. GOM-140.

²³² Id., p. 141.

²³³ Id.

1 **2. ORA’s Analysis**

2 ORA does not dispute SCG’s use of 32.7% to determine the Field Capital
3 Support expenditures for 2017 to 2019. ORA recommends the 2017 recorded
4 expenditure amount of \$65.384 million as the 2017 forecast. ORA recommends
5 \$57.749 million for 2018 and \$61.985 million for 2019. The differences between
6 ORA’s and SCG’s forecasts are solely based on the application of 32.7% to different
7 overall projected capital construction costs forecasts for 2018 and 2019.

8 The total amount of 2018 capital construction costs ORA recommends for
9 2018 is \$176.602 million. Based on applying the 32.7% ratio of Field Support costs
10 to total construction costs, the 2018 amount for Capital Field Support is \$57.749.
11 For 2019, ORA recommends \$189.557 million for capital construction costs. The
12 application of the 32.7% ratio again yields \$61.985 million for Capital Field Support
13 expenditures. ORA’s 2018 forecast of \$57.747 is \$12.543 million lower than SCG’s
14 request of \$70.292 million. ORA’s recommendation of \$61.985 million for 2019 is
15 \$12.633 million lower than SCG’s request of \$74.618 million.

16 **O. Remote Meter Reading**

17 Remote Meter Reading expenditures are for the replacements of curb meters
18 as part of the Planned Meter Change-Outs (PMC) associated with the AMI
19 implementation.²³⁴ The funding request for Remote Meter Reading is associated
20 with Customer Services Field’s meter change-out effort while the AMI project is
21 responsible for above-ground PMCs.²³⁵

22 SCG requests \$727,000 for 2017, \$2.032 million for 2018 and \$0 for 2019.
23 ORA recommends adopting the 2017 recorded expenditures of \$1.278 million for
24 2017 and \$0 for 2018. ORA does not take issue with the SCG proposals for 2019.
25

²³⁴ Ex. SCG-04-R, p. GOM-142.

²³⁵ Id.

1 The table below provides the SCG and ORA's 2017-2019 capital
2 expenditures forecasts.

3 **Table 11-54**
4 **Remote Meter Reading**
5 **2017-2019 Capital Expenditure Forecasts**
6 **(In Thousands of 2016 Dollars)**

Description	ORA Recommended			SoCalGas Proposed ²³⁶		
	2017	2018	2019	2017	2018	2019
Remote Meter Reading	\$1,278	\$0	\$0	\$727	\$2,032	\$0

7 **1. Overview of SCG's Request**

8 SCG requests \$727,000 for 2017 and \$2.032 million to change out curb
9 meters that are incompatible with AMI technology. According to SCG, there are
10 26,600 curb meters that are affected.²³⁷ SCG states that the costs to address these
11 meters are split 50/50 between O&M (presented in Ex. SCG-18) and capital.²³⁸

12 **2. ORA's Analysis**

13 For 2017, ORA recommends adopting the 2017 recorded expenditure of
14 \$1.278 million for Remote Meter Reading instead of SCG's forecast of \$727,000.
15 ORA disputes SCG's request of \$2.032 million for 2018.²³⁹ ORA recommends no
16 funding for 2018 because SCG has already received funding to change out curb
17 meters with AMI technology by end of 2017, discussed below.

18 SCG requests \$2.032 million to replace 26,600 curb meters with AMI
19 technology.²⁴⁰ This funding request is part of the 50/50 cost split between CSF and

²³⁶ Ex. SCG-04, p. GOM-141, Table GOM-56.

²³⁷ Ex. SCG-04-R, pp. GOM-142, -143.

²³⁸ Ex. SCG-04-R, p. 143.

²³⁹ Ex. SCG-04-R, p. GOM-142.

²⁴⁰ Id.

1 the AMI project as part of the Planned Meter Change-outs associated with the AMI
2 implementation.²⁴¹

3 SCG has not completed the AMI deployment of the curb meters and the
4 meters have not been upgraded with the AMI technology.²⁴² At the end of 2016,
5 there are at total of 22,162 curb meters and not the 26,600 meters that SCG
6 inaccurately proposed in testimony.²⁴³ The curbside meter upgrades were part of
7 the AMI deployment effort between 2013 and 2017 and should have been completed
8 by the end of 2017. SCG confirms this, stating, “Over the course of the deployment
9 period, all GRC and AMI-funded planned meter changes will be completed.”²⁴⁴
10 However, this is not the case.

11 SCG claims that due to a manufacturing issue identified with MTUs located in
12 curb meter vaults, the deployment of curb meter MTUs pending installation at the
13 time was put on hold until the replacement MTU product is available. Therefore, the
14 deployment period was extended beyond 2017 into 2018.²⁴⁵

15 SCG should not be authorized additional funding beyond the AMI deployment
16 period. SCG was authorized funding in rates through the AMI application and its
17 GRC for the deployment period 2013 to 2017.²⁴⁶ The deployment period ended in
18 2017. Funding for AMI deployment projects also ended in 2017. SCG was
19 authorized funding within the 5 year period to complete the AMI deployment project.
20 Any delay in receiving parts should be borne by SCG and/or its shareholders.
21 Ratepayers should not be held accountable for any project delays due to
22 manufacturing issues. SCG received the full funding for all parts regardless when

²⁴¹ Ex. SCG-04-R, pp. GOM-142 to GOM-143.

²⁴² SCG’s response to data request ORA-SCG-075-DAO, Q. 7.

²⁴³ SCG’s response to data request ORA-SCG-075-DAO, Q. 2(e), iii.

²⁴⁴ Ex. SCG-04-R, WP, p. 231.

²⁴⁵ SCG’s response to data request ORA-SCG-075-DAO, Question 2(a).

²⁴⁶ Ex. SCG-04-R, WP, p. 231.

1 the parts were manufactured. Ratepayers would be paying twice for the same
2 parts if the Commission authorizes the SCG request of \$2.032 million.

3 ORA recommends no funding for AMI deployment costs for curb meters as
4 part of the Remote Meter Reading expenditures. Ratepayers finished paying for
5 AMI deployment at the end of 2017. Because SCG failed to receive the right parts by
6 end of 2017 is insufficient reason to make ratepayers pay for them again.

7

1 **PART V: GAS CONTROL & SYSTEM OPERATIONS/PLANNING**
2 **EXPENSES**

3 **I. NON-SHARED EXPENSES**

4 The Non-Shared expenses for Gas Control and System Operations/Planning
5 provide support for the following departments: (1) Storage Products Manager, and
6 (2) SoCalGas Emergency Services.²⁴⁷

7 The table below provides the recorded expenses for the Non-Shared services
8 from 2012-2016. Also included are the 2019 forecasts by SCG and ORA. ORA
9 does not take issue with SCG's request for Storage Products Manager. ORA
10 recommends a lower expense level for 2019 than SCG's request.

11 **Table 11-55**
12 **Non-Shared Gas Control & System Operations/Planning Expenses**
13 **2012-2016 Recorded and 2019 Forecast**
14 **(In Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Storage Products Mgr.	\$167	\$151	\$167	\$150	\$146	\$156	\$156
Emergency Services	\$656	\$905	858	717	\$640	\$2,816	\$1,145
Total	\$823	\$1,056	\$1,025	\$867	\$786	\$2,972	\$1,301

15 Source: 2012-2016 data from Ex. SCG-13-WP, pp. 5, 12.. SCG 2019 forecasts from Ex. SCG-13, p.
16 DKZ-14, Table DKZ-8.

17 **A. Storage Products Manager**

18 According to SCG, the expenses for this work category are to provide
19 unbundled natural gas storage and parking services through the California Energy
20 Hub.²⁴⁸ SCG describes that this group manages the business relationship with
21 unbundled storage and hub service customers and purchases natural gas to
22 maintain system integrity.²⁴⁹

²⁴⁷ Ex. SCG-13, p. DKZ-1.

²⁴⁸ Ex. SCG-13, WP, p. 5.

²⁴⁹ Id.

1 **1. Overview of SCG’s Request**

2 SCG requests \$156,000 in expenses for 2019.²⁵⁰ SCG’s forecast is based
3 on using the 5-year (2012-2016) recorded expenses for this work category.

4 **2. ORA’s Analysis**

5 ORA does not dispute SCG’s forecast for Storage Products Manager.

6 **B. Emergency Services**

7 According to SCG, Emergency Services expenses are for facilitating
8 emergency preparedness by ensuing effective comprehension, and responsive
9 recovery program.²⁵¹

10 **1. Overview of SCG’s Request**

11 SCG requests \$2.816 million in expenses for Emergency Services for
12 2019.²⁵² The SCG 2019 forecast is an increase of \$2.176 million above the 2016
13 recorded amount of \$640,000. For the Test Year forecast, SCG uses the 5-year
14 (2012-2016) average to determine the base year amount. To this base amount,
15 SCG requests an incremental funding of \$2.176 million for a total of \$2.816
16 million.²⁵³ According to SCG, the primary cost drivers are based on enhancing
17 compliance with mandated state and federal rules.

18 SCG states that currently there are 6 employees supporting the work
19 activities under Emergency Services. SCG is requesting the incremental expenses
20 to fill an additional 14 positions by 2019.²⁵⁴

²⁵⁰ Id., at page 5.

²⁵¹ Ex. SCG-13, WP, p. 12.

²⁵² Ex. SCG-13, WP, p. 12.

²⁵³ Ex. SCG-13, p. DZK-14..

²⁵⁴ EX. SCG-13, p. DKZ-15.

1 **2. ORA's Analysis**

2 ORA disputes SCG's request of \$2.816 million for 2019 because it is
3 excessive and inadequately supported. Between the years of 2012 and 2016,
4 SCG's spending ranged from \$640,000 to \$905,000, as can be seen in the table
5 above. ORA recommends \$1.145 million for 2019, which is the SCG 2017 recorded
6 amount for Emergency Services.

7 **a. SCG Triples FTEs in 2019**

8 SCG requests an additional 13.4 FTEs, for a forecast of 18.5 FTEs in
9 2019.²⁵⁵ SCG's request of 18.5 FTEs is more than triple the number of recorded
10 FTEs, 5.1, in 2016.²⁵⁶ The table below provides the year to year number of
11 recorded FTEs from 2012-2016.²⁵⁷ As can be seen, the recorded annual expenses
12 for Emergency Services from 2012 to 2016 have been trending downward.

13 SCG has not provided adequate support warranting a triple workforce for
14 Emergency Services.

15 **Table 11-56**
16 **SCG Emergency Services**
17 **Recorded FTEs from 2012-2016 and 2017-2019 Forecasts**

18

Years	In 2016\$ (000) Incurred Costs								
	Adjusted-Recorded					Adjusted-Forecast			
	2012	2013	2014	2015	2016	2017	2018	2019	
Labor	557	676	670	571	567	1,018	1,298	1,718	
Non-Labor	99	230	188	147	73	147	572	1,097	
NSE	0	0	0	0	0	0	0	0	
Total	656	905	858	717	640	1,165	1,870	2,815	
FTE	4.9	6.0	6.2	5.2	5.1	8.5	12.5	18.5	

19 **b. Compliance with G.O. 112-F**

20 SCG claims that, "In order to maintain compliance with these [G.O. 112-F]
21 requirements, SoCalGas will need to enhance internal and consultant support,
22 tabletop exercises, and training and exercises frequencies as well as amend

²⁵⁵ Ex. SCG-13, WP, p. 12.

²⁵⁶ Id.

²⁵⁷ Ex. SCG-04-R, WP, p. 12.

1 company standards and policies to comply with emerging regulation mentioned
2 above.”²⁵⁸ According to SCG, Emergency Services is responsible for implementing
3 a compatible Incident Command System (ICS), by developing new emergency
4 preparedness and response exercise training materials.²⁵⁹

5 In general, G.O. 112-F, section 143.6, requires utilities to establish
6 emergency response procedures compatible with the ICS used by the first
7 responder community within the State of California, and to have the ICS in place to
8 be activated when necessary.²⁶⁰ All utilities are required by G.O. 112-F to establish
9 emergency response procedures no later than January 1, 2017.²⁶¹

10 Prior to the issuance of G.O. 112-F, SCG already had an ICS compatible with
11 the ICS used by the first responder community of California.²⁶²
12 SCG states its ICS was in place for activating when necessary prior to the issuance
13 of G.O. 112-F.²⁶³ This means that SCG was able to meet the G.O. 112-F
14 requirements with the embedded funding it received in the previous GRC. If it is
15 necessary for SCG to use additional funding between test years, the expenses for
16 the G.O. 112-F would be reflected in 2017.

17 In 2017, SCG recorded \$1.145 million for this category.²⁶⁴ The 2017
18 recorded expenses reflect any additional work activities necessary for compliance.
19 According to SCG, the 2017 forecast in its testimony includes 5 additional positions
20 for two categories previously not allocated: (1) Regulatory Compliance,
21 Communications, Stakeholders Outreach, and Training Program, and (2) Enterprise
22 Planning, Technology Advancement, and Training Program Development. There

²⁵⁸ Ex. SCG-13, pp. 15-16.

²⁵⁹ Id., at p. 15.

²⁶⁰ G.O. 112-F, Section 143.6, Compatible Emergency Response Standard.

²⁶¹ Id.

²⁶² SCG’s response to data request ORA-SCG-089-DAO, Q. 1(a).

²⁶³ SCG’s response to data request ORA-SCG-089-DAO, Q. 1(b).

²⁶⁴ See Ex. ORA-01, Attachment 2.

1 are no new categories added for 2019. See the figure below for the details of the
2 work categories.

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Figure V
SCG's Emergency Services Staffing
2016 Recorded, 2017-2019 Forecasts

POSITION (HC)	2016	2017	2018	2019
EMERGENCY SERVICES DIRECTOR	1	1	1	1
CORE EMERGENCY OPERATIONS CENTER OPERATIONS	5	2	2	2
EMERGENCY SERVICES ENHANCEMENT PROGRAM		2	2	2
REGULATORY COMPLIANCE, COMMUNICATIONS, STAKEHOLDER OUTREACH, AND TRAINING PROGRAM		3	4	8
ENTERPRISE PLANNING, TECHNOLOGY ADVANCEMENT & TRAINING PROGRAM DEVELOPMENT PROGRAM.		2	4	6
TOTAL HC	6	10	13	19
TOTAL FTE	6.1	8.5	12.5	18.5

7

8 SCG's expenses from 2012-2016 show a downward trend. The increase in
9 expenses recorded in 2017 is adequate to support any additional work for
10 compliance with G.O. 112-F because SCG already had the ICS structures in place
11 prior to the compliance date of January 1, 2017.

12 The 2017 expense level is adequate for the work activities in Emergency
13 Services. ORA recommends the 2017 recorded expenses, \$1.145 million, as the
14 forecast for 2019. The ORA forecast amount is \$1.670 million lower than SCG's
15 request of \$2.815 million.

16 **II. SHARED EXPENSES**

17 Shared expenses cover the activities to support the function of Utility System
18 Operations for both SCG and SDG&E.²⁶⁵ The Shared expenses are to support the
19 following departments: (1) Energy Markets and Capacity Products, (2) Gas
20 Scheduling, (3) Gas Transmission Planning, and (4) Control and SCADA.

21

²⁶⁵ Ex. SCG-13, p. DZK-16.

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Table 11-57
Shared Gas Control & System Operations/Planning Expenses
2012-2016 Recorded and 2019 Forecast
(in Thousands of 2016 Dollars)

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
Energy Markets & Capacity Products	\$1,490	\$1,577	\$1,465	\$1,688	\$1,553	\$1,550	\$1,550
Gas Scheduling	\$530	\$576	\$597	\$568	\$600	\$724	\$724
Gas Trans Planning	\$668	\$598	\$563	\$646	\$607	\$691	\$691
Control & SCADA	\$2,455	\$2,472	\$2,508	\$2,559	\$2,481	\$3,021	\$3,021
Total	\$5,143	\$5,223	\$5,133	\$5,461	\$5,241	\$5,986	\$5,986

5 Source: 2012-2016, and 2019 data from Ex. SCG-13-WP, pp. 25, 32, 39, 47, 55, and 64

6 **A. Energy Markets & Capacity Products**

7 The expenses for Energy Markets and Capacity Products are to provide
8 capacity services for gas marketers that serve both SCG and SDG&E customers,
9 large nonresidential customers who choose to act as their own gas supplier, and
10 core aggregators.²⁶⁶

11 The table below provides the 2012-2016 recorded expenses for Energy
12 Markets and Capacity Products. Also included are the SCG and ORA forecasts for
13 2019. ORA does not dispute SCG’s 2019 forecast.

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15
16
17

Table 11-58
Energy Markets & Capacity Products Expenses
2012-2016 Recorded and 2019 Forecast
(in Thousands of 2016 Dollars)

Description	2012	2013	2014	2015	2016	SCG 2019	ORA 2019
EM&CP – Director	\$297	\$351	\$316	\$286	\$328	\$316	\$316
CP – Manager	\$617	\$561	\$507	\$800	\$615	\$615	\$615
CP – Support	\$576	\$665	\$642	\$602	\$610	\$619	\$619
Total	\$1,490	\$1,577	\$1,465	\$1,688	\$1,553	\$1,550	\$1,550

18 Source: 2012-2016 data from Ex. SCG-13-WP, p. 25, p. 32, and p. 39.

²⁶⁶ Ex. SCG-13, WP, p. 25.

1 **1. Overview of SCG’s Request**

2 SCG requests \$1.550 million for 2019. The utility uses a 5-year (2012-2016)
3 average to determine the forecast.²⁶⁷

4 **2. ORA’s Analysis**

5 As can be seen from the table above, SCG’s request of \$1.550 million for
6 2019 is comparable to historical spending for this work category. ORA does not take
7 issue with SCG’s request of \$1.550 million for Energy Markets and Capacity
8 Products for 2019.

9 **B. Gas Scheduling**

10 Gas Scheduling manages the day-to-day system and operations 24/7. Gas
11 Scheduling also is responsible for implementing the Operational Flow Order (OFO)
12 and Emergency Flow Order (EFO) per Commission order.²⁶⁸

13 **1. Overview of SCG’s Request**

14 SCG request \$724,000 in expenses for Gas Scheduling. SCG also requests
15 the recovery of \$1.696 million recorded in the OFO/EFO memorandum account,
16 which was authorized in Sempra’s 2016 GRC per CPUC decision D.15-06-004.²⁶⁹

17 **2. ORA’s Analysis**

18 **a. Gas Scheduling**

19 ORA does not take issue with the SCG forecast of \$724,000 in expenses for
20 Gas Scheduling for 2019.

21 **b. OFO/EFO Memorandum Account**

22 According to SCG, in its 2016 GRC, the utility forecasted \$956,000 in
23 expenditures as part of its request to implement changes to Sempra’s Low OFO and

²⁶⁷ Ex. SCG-13, WP, pp. 25, 32, and 39.

²⁶⁸ Ex. SCG-13, p. 19.

²⁶⁹ Ex. SCG-13, p. DKZ-32, and DKZ-37.

1 EFO Requirements.²⁷⁰ The Commission authorized the changes to the OFO/EFO
2 requirements that Sempra had proposed. Commission decision D. 15-06-004
3 ordered Sempra to establish a memorandum account that records the costs to
4 implement the procedures for the OFO/EFO.

5 In this GRC, SCG requests the recovery of \$1.696 million for OFO/EFO
6 capital costs the utility has incurred through 2017. The figure below provides a
7 breakdown of the costs incurred.

8 **Figure VI**
9 **SCG's OFO/EFO Memorandum Account**

OFO/EFO Cost Summary	
Capital Cost through 2017	
Internal Labor	\$ 560,251
Consultants	\$ 944,575
Other Direct Costs	\$ 1,756
Indirect Costs	\$ 135,791
AFUDC	\$ 53,512
Grand Total	\$ 1,695,885

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11 ORA does not dispute the recovery of the OFO/EFO memorandum account,
12 which recorded \$1.696 million at the end of 2017. However, ORA recommends
13 normalizing the costs over the 2018 and 2019 period to provide for a gradual
14 increase in rates. The ORA recommended annual amount for each year is
15 \$848,000. The treatment of the OFO/EFO costs is presented in Ex. SCG-42, and
16 addressed by ORA in Ex. ORA-30.²⁷¹

17 **C. Gas Transmission Planning**

18 SCG requests \$692,000 in expenses for Gas Transmission Planning for
19 2019.²⁷² This group is responsible for the long-term planning and design of
20 SoCalGas and SDG&E's gas transmission systems. According to SCG, "This group

²⁷⁰ Ex. SCG-13, p. DKZ-31.

²⁷¹ Ex. SCG-13, p. DZK-31.

²⁷² Ex. SCG-13, WP, p. 55.

1 continually assesses the transmission system’s ability to: meet CPUC-mandated
2 design standards; meet existing service obligations and satisfy new customer
3 demand; provide new services and products to customers; and access new sources
4 of natural gas supply. The department is also directly responsible for developing
5 analysis and reporting on the system’s ability to remain reliable through major
6 system outages and make recommendations to maintain system resiliency.”²⁷³

7 **1. Overview of SCG’s Request**

8 SCG requests \$692,000 in expenses for Gas Transmission Planning for
9 2019.²⁷⁴

10 **2. ORA’s Analysis**

11 The 2016 recorded expenses for Gas Transmission Planning is \$607,000.²⁷⁵
12 ORA does not take issue with SCG’s request.

13 **D. Gas Control & SCADA Operations**

14 The expenses for Gas Control and SCADA Operations are for the monitoring
15 of the control room 24/7 and the remote control of pipeline and compression facilities
16 on the transmission system.²⁷⁶

17 **1. Overview of SCG’s Request**

18 SCG requests \$3.021 million in expenses for Gas Control and SCADA
19 Operations for 2019.²⁷⁷ This amount is \$540,000 higher than the 2016 recorded
20 amount of \$2.481 million.

²⁷³ Ex. SCG-13, WP, p. 55.

²⁷⁴ Id.

²⁷⁵ Ex. SCG-13, p. DKZ-16.

²⁷⁶ Ex. SCG-13, pp. DKZ-20 to 21.

²⁷⁷ Id., at p. DKZ-2

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2. ORA’s Analysis

In 2017, SCG spent \$2.619 million for Gas Control and SCADA Operations. SCG’s request is comparable to recent recorded expenses. Therefore, ORA does not take issue with SCG’s request of \$3.021 million for 2019.

E. Support for SCG Fleet Services and Facility Operations

In Ex. SCG-13, SCG provides support for its proposal to relocate the gas control facility.²⁷⁸ The costs associated with this proposal are presented in Ex. SCG-23-R.²⁷⁹

ORA disputes SCG’s funding request for the relocation of its gas control facility. Please refer to Ex. ORA-19 for the reasons why ORA opposes this funding request.

²⁷⁸ Ex. SCG-13, p. DKZ-26.

²⁷⁹ Id.

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WITNESS QUALIFICATIONS

2 My name is Dao A. Phan. My business address is 505 Van Ness Avenue,
3 San Francisco, California. I am employed by the Office of Ratepayer Advocates
4 (ORA) as a Public Utilities Regulatory Analyst V in the Energy Cost of Service and
5 Natural Gas Branch.

6 I received a Master of Arts degree in Political Science from San Francisco
7 State University and a Bachelor of Arts degree in Political Science from California
8 State University, Hayward.

9 I have testified before the Commission as an expert witness in numerous
10 Commission enforcement and regulatory proceedings. I have been an expert
11 witness in the following areas and proceedings: gas distribution operations and
12 maintenance and capital expenditures; gas transmission and storage operations and
13 maintenance; long-term electric procurement; customer service issues; customer
14 accounts; and compensation and incentives.

15 This completes my prepared testimony.