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- 1. SCG-33, page SL-13, describes the 5-year forecast methodology:
- "Accounting Systems and Compliance is using a 5-year historical average of 2012-2016 costs to estimate the TY 2019 costs. The use of a 5-year average is appropriate and provides a reasonable basis for developing a forecast of TY 2019 costs for the Accounting Systems and Compliance department."
 - a. Please show the applicable, actual costs recorded for the last 10 years.

SoCalGas Response 1:

The table below reflects Accounting Systems and Compliance costs from years 2007 to 2016. These costs are shown in nominal dollars, i.e., not escalated. Please note that prior to 2011, the Manager of Accounting System and Compliance was a shared function in San Diego Gas & Electric. A separate Manager of Accounting System and Compliance position was created at SCG in December 2010.

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Recorded-Adjusted 8	& V&S, no I	Escalation								
(Nominal \$ in \$000)										
Labor	1,044	1,073	935	965	1,207	1,303	1,298	1,341	1,427	1,441
Non-Labor	52	42	37	42	29	31	24	21	20	17
NSE	-	-	-	-	-	-	-	-	-	-
Total	1,096	1,115	971	1,007	1,236	1,334	1,321	1,362	1,447	1,458

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- 2. SCG-33, page SL-14, describes the Incident Support Analysis department activities: "By proactively enhancing response plans with business units, ISA will help reduce the potential impact that major incidents have on normal operations as well as reduce potential business interruptions."
 - a. Over the GRC term, what cost savings are anticipated as the result of the ISA department's activities?
 - b. Over the GRC term, what total annual labor and non-labor costs are expected for the ISA department? Please explain.

SoCalGas Response 2:

Please reference the response to ORA Data Request 10 (DR-10), Question 1.b. (available at: https://www.socalgas.com/regulatory/A17-10-008.shtml).

The response provides information regarding the labor and non-labor costs for the test-year 2019 requested funding of \$1.10 million.

The final paragraph of the DR-10 response also contains information that addresses part b of this question.

SoCalGas has not forecasted specific funding for years beyond the 2019 test year, which will be addressed by the attrition mechanism.

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- 3. SCG-33, pages SL-20 and -21, describe Claims Management department activities: "The Claims department is asking for two incremental Claims Recovery Coordinators to reduce the recovery backlog of claims. Over the past few years, the claims recovery volume has increased 40%, but the staffing level has remained at a constant level. This increase has contributed to a 690% increase in the recovery backlog of open cases (normal backlog is 1k cases; current backlog is 6.9k)."
 - a. What factors led to the large backlog of claims, and what is SCG's outlook for the "new normal", after adding the new staff? Please explain.
 - b. What cost savings are expected to result from adding the two new Claims Recovery Coordinators? Please explain.
 - c. When does SCG expect the claims backlog to be cleared up by?

SoCalGas Response 3:

- a. A combination of 1) increased construction activity in SCG service territory, which led to an increase in damages to our underground system (new road projects, construction projects and or infrastructure upgrades) and 2) lack of resources dedicated to processing recovery cases, led to the increase in backlog of claims. With a full staff, the "new normal" should be an open case count in the 2,500 3,000 range.
- b. The cost savings will be realized by an increase in recovery effectiveness. The Claims Department will process recovery claims in a more timely manner resulting in a quicker turn around in the billing process, recovery and closure of these claims. The longer these types of claims stay open, the less likely the utility is to get recovery against the responsible party. The cost savings will be seen as a reduction to O&M expenses when SCG receives recovery dollars in a timely manner from responsible parties.
- c. With a full recovery staff, SoCalGas expects that the claims backlog can be back to a normal range within 12 18 months.

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4. SCG-33, page SL-21, describing Claims forecast methodology, notes that...

"Costs in this area are prone to fluctuations because the amount paid from litigation claims is dependent on the number of litigation matters brought against the Company as well as the dollar amount being sought by plaintiffs in litigation. While the actual claims cases over the past 5 years have remained relatively consistent in terms of volume of claims, the complexity of the allegations and legal theories of liability have increased potential exposure."

Page SL-21 also lists the claims volume over the past five years.

- a. Please show the value of claims costs recoreded for each of the past 10 years.
- b. Over the past 5 years, what have been the leading five causes of claims, and what is the observed trend in claims frequencies of each cause? Please describe.

SoCalGas Response 4:

a. The table below reflects Claims costs from years 2007 to 2016. These costs are shown in nominal dollars, i.e., not escalated.

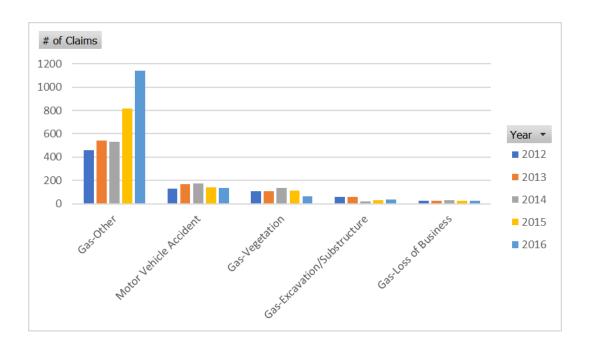
Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Recorded-Adjusted 8	k V&S, no Escal	ation								
(Nominal \$ in \$000)										
Claims Payout	3,329	3,604	6,604	7,341	2,067	4,642	7,403	2,584	7,358	14,176
Recovery Expenses	13	94	100	177	119	83	63	99	97	258
Total Claim Costs	3,342	3,698	6,704	7,518	2,186	4,724	7,466	2,683	7,455	14,434

b. Over the past 5 years, the leading five causes of claims are casualties from 1) Gas-other — these are claims for gas operations activities or customer services entered orders that result in damages to customer property (e.g., cracked driveway or sidewalk, broken sprinkler system while excavating, fence broken when entering customer premise, damaged to gas appliance while working on it, etc.); 2) Motor Vehicle Accidents; 3) Gas-Vegetation — these are claims for payments for dead landscape due to natural gas leaks; 4) Gas-Excavation/Substructure — these are claims for damages to another entity's underground facilities; and 5) Gas-Loss of Business — these are claims from third parties for lost income.

In the chart below, SoCalGas sets forth the 5-year trend in claims frequencies for each of the five leading causes of claims.

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SoCalGas Response 4 Continued:



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5. Table SL-17 of SCG-33 reports Regulatory Affairs Division Incurred Costs by Department. **TABLE SL-17**

Regulatory Affairs Division Incurred Costs by Department

Regulatory Affairs Division (In 2016 \$)	2016 Adj	usted-Recor	ded (000s)	TY201	19 Estimate	d (000s)	C	hange (000s	s)
	NSS	USS	Total	NSS	USS	Total	NSS	USS	Total
Director - Reg Affairs	0	186	186	0	215	215	0	29	29
Regulatory Tariffs & Info	662	0	662	676	0	676	14	0	14
Case Management	0	716	716	0	1,094	1,094	0	378	378
Gas Rates & Analysis	0	171	171	0	322	322	0	151	151
Gas Forecasting &	0	805	805	0	877	877	0	72	72
Analysis									
GRC & Rev Requirements	0	825	825	0	1,304	1,304	0	479	479
Total	662	2,703	3,365	676	3,812	4,488	14	1,109	1,123

a. Please provide a table showing the costs incurred, categorized by work associated with each applicable regulatory agency, for 2016.

SoCalGas Response 5:

The requested info is unavailable as Regulatory Affairs expenses are not tracked or identified by regulatory agency.

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- 6. SCG-33, page SL-29, discusses Regulaory Case Management, and says...
 "For TY 2019, Regulatory Case Management requests \$1.09 million, an increase of \$378k from the 2016 adjusted-recorded costs. The increase is partially attributable to employees returning to normal operations after temporary deployment to mitigate the Aliso leak. The Regulatory Case Management department is also requesting two incremental Case Managers based on an increase in workload, which includes: (1) coordinating SoCalGas' participation in regulatory proceedings and related activities before the CPUC, including rate and non-rate related applications, CPUC-initiated investigations and rulemakings, and related legislative activities; (2) managing regulatory filings with the CPUC and other agencies; (3) coordinating compliance with CPUC directives and requirements; (4) retaining regulatory records and related information as part of the Utilities' Regulatory Central Files; and (5) maintaining effective working relationships with state and federal regulatory agencies, and being responsive to their requests for information or assistance. Case Management is also responsible for these same activities for FERC gas regulatory proceedings. Case Management is a shared service between SoCalGas and SDG&E."
 - a. Please provide a cross-tabulation showing how the proposed added expenses are budgeted by company unit (affiliate) and by regulatory agency, for 2019.
 - b. What were the department's actual expenditures in each of 2010 and 2013?

SoCalGas Response 6:

- a. The requested info is unavailable as Regulatory Affairs expenses are not tracked or identified by regulatory agency. The proposed added expenses would be allocated to affiliates based on the 2019 shared services allocation shown on page 122 of 148 of Exhibit No. SCG-33-WP.
- b. The table below reflects Case Management costs for year 2010 and 2013. These costs are shown in nominal dollars, i.e., not escalated.

Year	2010	2013
Recorded-Adjusted & V&S, no Escalation		
(Nominal \$ in \$000)		
Labor	576	854
Non-Labor	30	55
NSE	-	-
Total	606	910

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- 7. SCG-33, page SL-30, describes activities of the Gas Rates and Analysis department... "Historically, the department has maintained between three to four FTEs but was understaffed starting in 2014 with only two FTEs. In base year 2016, the FTE count was under two, therefore the Gas Rates & Analysis department requests two analysts to fill these vacancies to support the departmental needs and operate at full capacity."
 - a. What were the actual department expenses for each year, 2010 through 2014, and how many FTEs were in the department in each of those years?

SoCalGas Response 7:

a. The table below reflects Gas Rates and Analysis costs and FTEs for year 2010 to 2014. These costs are shown in nominal dollars, i.e., not escalated.

Year	2010	2011	2012	2013	2014
Recorded-Adjusted 8	& V&S, no	Escalation			
(Nominal \$ in \$000)					
Labor	486	488	401	421	269
Non-Labor	8	10	7	8	7
NSE	-	-	-	-	-
Total	493	498	408	429	276
FTE	4.8	5	4	4.1	2.4

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- 8. SCG-33, page SL-30, describes activities of the Gas Rates and Analysis department... "Historically, the department has maintained between three to four FTEs but was understaffed starting in 2014 with only two FTEs. In base year 2016, the FTE count was under two, therefore the Gas Rates & Analysis department requests two analysts to fill these vacancies to support the departmental needs and operate at full capacity."
 - a. What were the actual department expenses for each year, 2010 through 2014, and how many FTEs were in the department in each of those years?

SoCalGas Response 8:

a. See response 7.

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- 9. SCG-33, page SL-33, describes activities of the External Affairs Division... "For TY 2019, the GRC and Revenue Requirements department requests \$1.30 million, an increase of \$479k from 2016 adjusted-recorded costs...The additional funds requested to support the GRC and Revenue Requirements department will be used to fill vacancies. These employees will assist with increasing GRC and other regulatory requirements."
 - a. Does the proposed budget assume the continuation of 3-year GRC cycle?
 - b. If not, how would the adoption of a 4-year GRC cycle impact the needed expenses? Please explain.

SoCalGas Response 9:

- a. To clarify, the above statement is on page SL-31 of SCG-33 and describes activities of the GRC and Revenue Requirements department under the Regulatory Affairs Division. The proposed amount of \$1.30 million is for the 2019 test year and is based on a 5-year average (years 2012-2016) that is not impacted by the future length of the GRC cycle (whether it be 3 or 4 years). SoCalGas has not forecasted specific funding for years beyond the 2019 test year, which will be addressed by the attrition mechanism.
- b. See response to 9.a. above.

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10. Table MFL-4 presents the Gas Acquisition department's Non-Shared O&M Summary of Costs.

Table MFL-4 Non-Shared O&M Summary of Costs (\$000's)

PROCUREMENT (In 2016 \$)			
Categories of Management	2016 Adjusted-	TY 2019	Change
Gas Acquisition	Recorded	Estimated	
Total Labor	3,600	3,867	267
Total Non-Labor	313	363	50
Total Non-Shared Services	3,913	4,230	317

Page MFL-7 describes Gas Acquisition department expenses:

"Gas Acquisition Department non-labor expenses consist mainly of: 1) subscription fees to industry publications, 2) consultants and on-line services, and 3) training and associated travel expenses."

a. Please show the composition of those non-labor costs, per the listed expenditures, for each of actual 2013 and proposed for 2019.

Utilities Response 10a:

SCG believes CFC's question 10a. incorrectly includes the year "2013" and is requesting costs for Base Year 2016 (as indicated in Table MFL-4 above). As such, please see the composition of SCG's actual Base Year 2016 and forecasted 2019 non-labor costs below.

SCG GAS ACQUISITION NON-LABOR COSTS (\$000's)				
Category	2016	2019		
Subscriptions & On-Line Services	143	165		
Consultants	67	56		
Training & Conferences	19	20		
Travel Expenses	32	53		
Communications	17	15		
Office Supplies & Catering	13	23		
Other	22	31		
Total	313	363		
_				

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11. In SCG-04-WP, page 6 of the Non-Shared Services Workpaper describes the forecasting method for Locate & Mark...

"The activity in this workgroup is driven mainly by the level of construction activity. In general, IHS Global Insight forecasts that the non-farm employment growth rate is projected to increase in the Southern California area in the next few years."

a. Please describe the historical accuracy of the IHS Global-based forecast for this series, in terms of how well the previous editions of this forecast (that relied on the IHS forecast as an input) matched the eventual actual construction activity observed.

Utilities Response 11:

a. SoCalGas objects to this request as overly broad, unduly burdensome, and vague and ambiguous with regards to the time frame at issue and exceeds the scope of permissible discovery under Rule 10.1, of the Commission's Rules of Practice and Procedure. Subject to and without waiving the foregoing objection, SoCalGas responds as follows:

SoCalGas used the IHS Global Insight forecast as a directional indicator of the economy's growth. SoCalGas does not however, intend the report to be a strict correlation measure, as other factors and sources are included in the forecast methodology. SoCalGas did not perform the type of analysis requested and therefore it is not available.

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12. In SCG-04-WP, page 6 of the Non-Shared Services Workpaper describes the expected impact of SB 661 on non-labor costs for Locate & Mark operations:

"SoCalGas expects a rise in Locate and Mark due to SB 661 requiring any person who plans to conduct any excavation to contact the appropriate regional notification center before commencing excavation. For this reason, the Locate and Mark forecast is based on the linear trend observed the last five years (2012 through 2016). Using a five-year average or base forecast would not appropriately account for the increase in work anticipated over the forecast period, as construction activities continue to increase. Thus, to reflect these changing conditions and increase in Locate and Mark work, SoCalGas is projecting that forecasted expenses for this workgroup will follow the five-year historical linear trend. Therefore, a five-year (2012 through 2016) linear trend

plus the incremental funding was used to calculate the non-labor requested for this group." The objective of SB-661 was enhanced protection of subsurface installations. Dubbed the "Dig Safe Act of 2016," it specified several added means of protecting subsurface infrastructure.

- a. Please explain whether SCG anticipates realizing net cost savings as the result of the implementation of the Dig Safe Act of 2016, and, if so, the expected annual savings.
- b. Please explain the extent to which the proposed non-labor expenditures are contributions to maintaining a regional notification center.

Utilities Response 12:

- a. SoCalGas does not anticipate net cost savings as a result of the implementation of the Dig Safe Act of 2016. SoCalGas expects tickets and membership fees to increase due to the Dig Safe Act of 2016, which will affect locate and mark ticket costs, as mentioned in the revised testimony of Gina Orozco-Mejia Ex. SCG-04-R, page GOM-35, lines 2-8.
- b. For the purpose of this question, SoCalGas interprets proposed non-labor expenditures as incremental non-labor expenditures for USA North and USA South operation of the regional notification center, as referenced in the revised testimony cited in Question 12. SoCalGas also interprets 'contributions to the regional notification center' as the membership fees associated with both USA North and USA South. As a result of the Dig Safe Act of 2016, SoCalGas expects an increase in non-labor expenditures for ticket and membership fees for both, USA South and USA North. The increase in fees is required by the regional notification center operated by USA North and USA South. Please see workpapers SCG-04-WP, page 19, Supplemental 009 for detail on the proposed fee increases.

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13. In SCG-04, page GOM-7 describes the company requirements for added gas leak funding:

"In addition to continuing leak repairs in accordance with GO 112-F's requirements, SoCalGas requests incremental funding to further expedite reduction of its pending non-hazardous leak inventory and leak repair activities for additional leaks identified." Some of the applicable activities are identified: increased leak survey frequency; additional encroachment management; additional monitoring, reporting, and recordkeeping.

a. Please provide a table showing the leak repairs expenditures, for each of the above-noted categories (and any applicable others deemed significant), showing actuals for 2016 and proposed for 2019.

Utilities Response 13:

a. SoCalGas does not track leak repair expenditures based on the activities mentioned in the question. Leak repair expenditures are tracked under a main maintenance or services maintenance cost category, regardless of how the leak was found; therefore, leak repair costs are not available in the format requested. Please refer to the Main Maintenance workpaper in Exhibit No. SCG-04-WP-R, pp. 56-67 for costs associated with leak repairs on mains, including actual costs for 2016 and the forecast for 2019.

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14. In SCG-39, Table RMP-1 of page RMP-2 presents Average Annual Total Active Meters counts, for the years 2012 through 2019:

Table RMP-1 Southern California Gas Company Average Annual Total Active Meters

Year	Active Meters	Annual % change
2012	5,576,355	0.49%
2013	5,606,113	0.53%
2014	5,639,161	0.59%
2015	5,667,128	0.50%
2016	5,700,917	0.60%
2017	5,731,814	0.54%
2018	5,774,426	0.74%
2019	5,820,293	0.79%

a. What was the total actual number of active meters for 2017 (or the year-to-date count for 2017, to the last month of available data)?

Utilities Response 14:

a. The table below shows the 2017 recorded total active meter counts.

	ACTIVE METER	S
Jan-17	5,728,723	
Feb-17	5,737,565	
Mar-17	5,741,123	
Apr-17	5,742,550	
May-17	5,745,344	
Jun-17	5,744,389	
Jul-17	5,741,234	
Aug-17	5,742,028	
Sep-17	5,744,489	
Oct-17	5,747,502	
Nov-17	5,753,015	
Dec-17	5,758,278	
12-Month	5,743,853	(2017 total)

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15. In SCG-39, Table RMP-3 presents Average Annual Active Meters by Customer CI:

TABLE RMP-3 Southern California Gas Company Average Annual Active Meters by Customer Cl

					Total % Change
Gas Customers	2016	2017	2018	2019	2016 to 2019
Decidential single family					70,676
Residential single-family	3,666,098	3,686,385	3,710,509	3,736,774	1.93%
Residential multi-family					49,227
Residential Inditi-family	1,788,972	1,799,6371	1,818,3571	1,838,199	2.8%
Residential master meter					-766
Residential master meter	40,333	40,090	39,828	39,567	-1.9%-
Commercial					714
Commercial	188,465	188,947	188,072	189,178	.38%
Industrial					-475
mousurar	17,050	16,756	16,661	16,575	-2.8%
					119,376
TOTAL	5,700,917	5,731,814	5,774,426	5,820,293	2.1%

The 2017 and 2018 figures for Residential multi-family appear to have extra digits (i.e., there are 4 figures following the last thousands-comma.)

a. Please confirm the correct figures for that line of the table.

Utilities Response 15:

a. The data in the second row (Residential multi-family) of above table in the 2017 and 2018 columns incorrectly show an extra digit on the far right. Below is a table that reflects the active meter counts by market segment. The recorded numbers are displayed for 2012-2016. The years 2017-2019 are forecasted.

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Utilities Response 15 Continued:

SoCalGas Active Meter Forecast for GENERAL RATE CASE 2019

	<u>Active</u>	<u>Active</u>	<u>Active</u>	<u>Active</u>	<u>Active</u>	<u>Active</u>	
<u>Year</u>	<u>SF</u>	<u>MF</u>	<u>MM</u>	<u>Com</u>	<u>Ind</u>	<u>Total</u>	%Grow
2012	3,598,669	1,730,663	41,038	186,996	18,989	5,576,355	0.49%
2013	3,614,927	1,743,855	40,895	187,544	18,891	5,606,113	0.53%
2014	3,632,903	1,759,544	40,689	187,321	18,704	5,639,161	0.59%
2015	3,647,531	1,773,721	40,504	187,844	17,528	5,667,128	0.50%
2016	3,666,098	1,788,972	40,333	188,465	17,050	5,700,917	0.60%
2017	3,686,385	1,799,637	40,090	188,947	16,756	5,731,814	0.54%
2018	3,710,509	1,818,357	39,828	189,072	16,661	5,774,426	0.74%
2019	3,736,774	1,838,199	39,567	189,178	16,575	5,820,293	0.79%

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16. On page RMP-2 of SCG-39, Table RMP-1 shows a notable increase in the annual % change in Total Active Meters from 2017 to 2018:

Table RMP-1 Southern California Gas Company Average Annual Total Active Meters

Year	Active Meters	Annual % change
2012	5,576,355	0.49%
2013	5,606,113	0.53%
2014	5,639,161	0.59%
2015	5,667,128	0.50%
2016	5,700,917	0.60%
2017	5,731,814	0.54%
2018	5,774,426	0.74%
2019	5,820,293	0.79%

a. Why does SCG anticipate the steepening annual change from 2017 to 2018? Please explain, including identifying the forecast input variables that most account for the expected change in growth rates between the two years, and with particular regard to Residential-Multi-Family new meters.

Utilities Response 16:

a. In the meter forecast model, the driver of residential meter growth is housing starts. The forecast for housing starts in the SoCalGas service territory is obtained by I.H.S. Global Insights. For 2017-2018, I.H.S. Global Insight predicts housing starts to pick up. Multifamily housing start growth is expected to be 14% between 2017-2018 and the single-family housing start growth is expected to be 12% between 2017 and 2018.

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Utilities Response 16 Continued:

Table RMP-1 Southern California Gas Company Average Annual Total Active Meters

Year	Active Meters	Annual % change
2012	5,576,355	0.49%
2013	5,606,113	0.53%
2014	5,639,161	0.59%
2015	5,667,128	0.50%
2016	5,700,917	0.60%
2017	5,731,814	0.54%
2018	5,774,426	0.74%
2019	5,820,293	0.79%

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17. Page 2 of SCG-39-WP-S shows a table of Meter Model variable definitions:: The table of Variable Definitions for the Customer/Meter Forecast Models lists variable "DUM0711". The associated definition is: "DUMMY VARIABLE =1 WHEN DTE=200702<= DTE<=2-1104; =0 OTHERWISE"

Southern California Gas Company: Meter Model VARIABLE DEFINITIONS:

CONNCOM	Connected Commercial Meter Counts
CONNIND	Connected Industrial Meter Counts
CONNMF	Connected Residential Multi-Family Meter Counts
CONNMM	Connected Residential Master Meter Counts
CONNMML	Connected Master Meters lagged one quarter
CONNRES	Connected Total Residential
CONNSF	Connected Residential Single Family Meter Counts
CONNSFL	Connected Residential Single Family Meter Counts Lagged 1
	Quarter
CONNSFL2	Connected Residential Single Family Meter Counts Lagged 2
	Quarters
DCONNMF	One Quarter Change in Connected Residential Multi Family
	Meters
DCONNSF	One Quarter Change in Connected Residential Single Family
	Meters
DTE	Date
DUM8102	DUMMY VARIABLE = 1 WHEN DTE=198102; =0 OTHERWISE
DUM8601	DUMMY VARIABLE = 1 WHEN DTE=198601; =0 OTHERWISE
DUM9603	DUMMY VARIABLE =1 WHEN DTE=199603; = 0 OTHERWISE
DUM0303	DUMMY VARIABLE = 1 WHEN DTE=200303; =0 OTHERWISE
DUM0503	DUMMY VARIABLE =1 WHEN DTE=200503; =0 OTHERWISE
DUM8604	DUMMY VARIABLE =1 WHEN DTE=198604; =0 OTHERWISE
DUM0711	DUMMY VARIABLE =1 WHEN DTE=200702<= DTE<=2-1104; =0
	OTHERWISE
INACTCOM	Inactive Commercial Meter Set Counts
INACTIND	Inactive Industrial Meter Set Counts
INACTMF	Inactive Multi Family
INACTMM	Inactive Master Meter
INACTRES	Inactive Residential
INACTSF	
NEWSETS	NEW METER SETS
PCTINACTCOM	Percent Inactive Commercial

a. Please confirm whether the "DTE<=2-1104" portion of the expression is correct. If it is correct, please explain its meaning.

Utilities Response 17:

It is correct. The dummy variable "Dum0711" is a variable whose value equals 1 when the date range falls between Q2 2007 and Q4 2011. Otherwise, the dummy is zero.

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18. The following is an excerpt from the table presented in SDG&E-GOM-Capital-SUP-006, in exhibit SDG&E-04-CWP, at page 118:

			2019 GRC Forecast - \$(000) of \$2016					
			20	17	18	20	19	
[E]	[F]	[G]	[H]	[I] [GxH]	[1]	[K] [GXI]	[L]	[M] [GxL]
RAMP Activity	Unit	Unit Cost	Units	Forecast	Units	Forecast	Units	Forecast
Early Vintage Steel								
Replacement ¹	1 Mile Replacement	\$1,000,000	1.9	\$1,900	5.5	\$5,485	7.4	\$7,385
Pre-1933 Threaded Steel								
Main Removal ²	1 Mile Replacement	\$1,000,000	0.0	\$0	7.4	\$7,385	14.8	\$14,770
Dresser Mechanical								
Coupling Removal ³	Hours (Work Order Review)	\$80	780.0	\$62	0.0	\$0	0.0	\$0
Dresser Mechanical								
Coupling Removal ³	1 Fitting Removal	\$160,000	5.8	\$926	4.3	\$6,952	49.1	\$7,876
Oil Drip Piping Removal ⁴	Hours (Work Order Review)	\$80	176.0	\$14	0.0	\$0	0.0	\$0
Oil Drip Piping Removal ⁴	1 Oil Drip Removal	\$160,000	0.0	\$0	58.0	\$9,275	58.0	\$9,275
Buried Piping in Vaults								
Replacement	Hours (Work Order Review)	\$80	0.0	\$0	2,713.0	\$217	2,713.0	\$217
Buried Piping in Vaults	1 Buried Vault and Piping				l			
Replacement	Removal	\$160,000	0.0	\$0	0.0	\$0	48.2	\$7,719
Closed Valves Between								
Medium and High Pressure	1 Valve Removal	\$160,000	0.0	\$0	22.3	\$3,570	0.0	\$0
	1 CP Station (Data Verification							
CP Reliability Enhancment ⁵	& Modeling)	\$8,000	0.0	\$0	128.4	\$1,027	418.6	\$3,349
Supervisor University ⁶	1 FTE	\$100,000	0.0	\$0	2.7	\$277	3.2	\$319

The table shows an increasing rate of steel mains replacements.

- a. Please confirm whether the vintage steel pipe replacement is on the SDG&E system, or the SoCalGas system.
- b. If the replaced pipe is on the SDG&E system, please show the miles of vintage steel pipe remaining in the fleet, at the end of each year from 2010 to 2017.
- c. Given the current vintage steel replacement program, at what year will all such pipe have been removed from Sempra's two networks?
- d. Please explain the extent to which the replacement steel mains on the SDG&E network are in the form of changing-out narrower-gauge pipe (2" to 8"), with wider-gauge pipe (8" to 12").

Utilities Response 18:

a. Yes, this supplemental workpaper (SDG&E-GOM-Capital-SUP-006) describing the vintage steel replacement applies to the SDG&E gas system. SDG&E requested funding for replacement of early vintage steel; however, the program is different from the Bare Steel Replacement Program presented for SoCalGas (Ex. SCG-14), which has a replacement

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Utilities Response 18 Continued:

- b. horizon. In previous years, there had been no specific program to address early vintage steel in SDG&E's system.
- c. SDG&E objects to this request under Rule 10.1 of the Commission's Rules of Practice and Procedure on the grounds that the timeframe encompassed in this request is not relevant to the subject matter involved in the pending proceeding and therefore, the burden, expense and intrusiveness of this request outweighs the likelihood that the information sought will lead to the discovery of relevant and admissible evidence. In particular, this request seeks information prior to 2012 and is thus, outside the scope of the relevant time period used by SDG&E in developing its forecasts. Subject to and without waiving the foregoing objection, SDG&E responds as follows with data covering 2012-2017: Please see response to Question 18.a. Table 1 below shows, by each year from 2012-2017, the mileage of pre-1947 or vintage steel mains and services still in service.

Table 1

2019 GRC SDG&E Gas Distribution - CFC-SEU-SDG&E-DR-001-Q18
Pre-1947 Steel Mains & Services - In Service by Year

	Pre-1947 Steel Mains
Year	and Services
	(Miles)
2012	559
2013	558
2014	556
2015	553
2016	551
2017	545

d. For purposes of this response, the "two networks" are SoCalGas and SDG&E. For SoCalGas, the DIMP Program - Projects and Activities to Address Risk (PAAR) are discussed in Exhibit SCG-14 Direct Testimony of Martinez, pages MTM-1 to MTM-27. The specific PAAR project to address vintage steel replacement is the Bare Steel Replacement Plan (BSRP), which is on pages MTM-25 to MTM-26. SoCalGas is planning to target 29 miles of mains and associated services per year with a 25- to 30-year horizon for wholesale replacement of non-state-of-the-art bare steel.

SDG&E has not forecasted what date the vintage steel pipe will be totally removed from SDG&E's service territory.

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Utilities Response 18 Continued:

e. Steel main replacement is performed on SDG&E's system primarily for three reasons: 1) to replace aging pipe that is beyond its useful life, 2) to relocate the pipe due to other utility or municipality conflict, and 3) to install larger diameter pipeline to meet increased system demand. The first two replacement types may or may not involve an increase in the diameter of the main. If there is a recognized need for increased supply to meet a growing system demand (the third replacement type), a larger diameter main will replace the main that has been removed.

A description and forecast for main replacements for pressure betterment or changes to accommodate an increase in system demand are in the Pressure Betterment (Budget Code 503) section of Exhibit SDG&E-04-R, pages GOM-77 to GOM-79. These are primarily new added pipelines, but in some cases they involve replacements. A description and forecast for main and service replacements to eliminate potentially hazardous conditions due to leaking or deteriorated gas pipelines are in the Replacement of Mains and Services (Budget Code 508) section of Exhibit SDG&E-04-R, pages GOM-88 to GOM-91.

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19. In SCG-14, page MTM-10 describes the replacement strategy for vintage steel pipe:

"For the replacement of the early vintage steel (bare steel), a wholesale replacement of the bare steel main population regardless of pipe performance was considered as part of RAMP, and following that assessment, the scope was tailored to address base steel pipelines with a history of poor performance. As part of the replacement, the performance of the bare steel main will be monitored to determine if and when adjustment to the replacement rate is warranted."

- a. Generally, are the steel mains with poor performance histories cathode protected? Please explain.
- b. Of the steel mains replaced since 2010, how many total miles were switching out narrower-gauge pipe (2" to 8") for wider-gauge pipe (8" to 12")?
- c. Please provide a table showing the following, for each of 2010 and 2017 (2016, if 2017 figures are not yet available): total miles of steel mains; total miles of non-steel mains; total services.

SCG-02, page 51, describes asset management plans, and identifies certain performance metrics for gas distribution:

- "...for the Distribution pipe asset family, information pertaining to asset performance such as 3rd party dig ins, leaks, etc. are utilized to construct investment plans and there is evidence of prioritization within the asset group."
- d. Please list and describe the performance metrics applicable to mains and services that are used to prioritize replacement projects.

Utilities Response 19:

- a. Generally yes.
- b. SoCalGas objects to this request under Rule 10.1 of the Commission's Rules of Practice and Procedure on the grounds that the timeframe encompassed in this request is not relevant to the subject matter involved in the pending proceeding and therefore, the burden, expense and intrusiveness of this request outweighs the likelihood that the information sought will lead to the discovery of relevant and admissible evidence. In particular, this request seeks information prior to 2012 and the start of the DIMP program. Subject to and without waiving the foregoing objection, SoCalGas responds as follows: As part of DREAMS (which the vintage steel replacement plan was part of prior to becoming its own PAAR in 2017), from SoCalGas' available records there have been no conversions of steel main that increased a pipe size from the range of 2-8" to a pipe size between the range of 8-12."

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Utilities Response 19:-Continued

c.

SoCalGas 2016 DOT Distribution Report, Part B Section 1

		Steel									
	Unpi	Unprotected Cathodically Protected									
	Bare	Coated	Bare	v							
Miles of Main	3,287	4,667	0	18,198	24,204						
No. of	139	853,266	20	736,634	2,841,243						
Services											

Average service Length – 59 Ft

SoCalGas 2010 DOT Distribution Report, Part B Section 1

		Steel									
	Unpi	Plastic									
	Bare	Coated	Bare	Cathodically Protected Bare Coated							
Miles of Main	5,574	2,493	0	17,909	22,892						
No. of	129	893,092	18	758,504	2,707,778						
Services											

Average service Length – 59 Ft

d. The Distribution Risk Evaluation and Monitoring System (DREAMS) prioritizes early-vintage steel (pre-1960) and plastic (pre-1986) for replacement. The risk evaluation considers the leakage history, cathodic protection (for steel), vintage of the pipe, and the location using E-GIS. The DREAMS-driven main and service replacements represent activity that is incremental to routine replacement work and required to maintain system integrity, along with compliance with DIMP regulatory requirements.

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- 20. Page 51 of SCG-02, Appendix C (Accenture's "Risk Maturity and Integration of Risk, Asset, and Investment Management at SoCalGas: An Assessment Report"), describes the development of plans to manage assets. Amongst other things, it states that...
 "Certain asset groups such as Transmission pipe are utilizing risk-based asset management plans. Similarly, for the Distribution pipe asset family, information pertaining to asset performance such as 3rd party dig ins, leaks, etc. are utilized to construct investment plans and there is evidence of prioritization within the asset group."
 - a. Generally, are the steel mains with poor performance histories cathode protected? Please explain.
 - b. Of the steel mains replaced since 2010, how many total miles were switching out narrower-gauge pipe (2" to 8") for wider-gauge pipe (8" to 12")?
 - c. Please provide a table showing the following, for each of 2010 and 2017 (2016, if 2017 figures are not yet available): total miles of steel mains; total miles of non-steel mains; total services.
 - SCG-02, page 51, describes asset management plans, and identifies certain performance metrics for gas distribution:
 - "...for the Distribution pipe asset family, information pertaining to asset performance such as 3rd party dig ins, leaks, etc. are utilized to construct investment plans and there is evidence of prioritization within the asset group."
 - d. Please list and describe the performance metrics applicable to mains and services and that are used to prioritize replacement projects.

Utilities Response 20:

Other than the referenced testimony and quote before the questions posed, this question is an exact duplicate of Question 19, so please see our response to Q.19 a-d.

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- 21. Page 51 of SCG-02, Appendix C (Accenture's "Risk Maturity and Integration of Risk, Asset, and Investment Management at SoCalGas: An Assessment Report"), describes the development of plans to manage assets. Amongst other things, it states that...
 - "...there appears to be opportunity to better understand the physical locations and condition of the asset groups. There has been a major program around the implementation of a GIS system; but, interviews revealed a lack of confidence over the quality of data within the GIS system. Additionally, geo-location appears to only cover a subset of the asset groups. This may be an intentional limitation that reflects a balance of cost and risk, but consideration should be given to address any gaps in asset knowledge. At a foundational level having clear line-of-sight to this basic data will make a major difference in the understanding of the assets. Once this information is collected the connection with GIS systems will allow for improved connection with the future asset management strategies and plans."
 - a. For distibution pipe assets, please describe the extent of the system that has already been incorporated into Sempra's GIS database, what assets remain to be so-included, and how will those proportions change by the end of the GRC term (i.e., by December 2021)

Utilities Response 21:

a. SoCalGas and SDG&E have a completed asset baseline which identifies gas assets based upon dimensioning from cadastral data (i.e., property boundaries) and through the use of geo-spatial data. These types of placement methodologies are acceptable for reporting purposes and thus SoCalGas and SDG&E will continue employing both methodologies through the GRC cycle depending on asset type and reporting needs.

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- 22. In SCG-04, pages GOM-77 through GOM-80 discuss proposed additions to the Gas Distribution management division. Amongst the reasons cited for the additions:
- "...SoCalGas has experienced increased regulatory pressure resulting in the need to establish enhanced compliance assurance practices.
- The need to support new field technologies and to facilitate the integration of these tools within the field processes.
- Increased turnover in workforce presents issues of knowledge transfer, skills development, and overall proficiency of the replacement workforce.
- Introduction of new construction and maintenance methods into office and field functions."
- a. Please explain whether a specific regulation (or regulations) has (have) directly caused the recommended increase in Gas Distribution management positions, what that regulation is (or regulations are), and how it/they affected the proposed spending increase.
- b. Please explain whether the added positions will be filled from within Sempra's existing field personnel, by outside recruiting, or a mixture of both, and if the latter, what proportion will be filled by existing employees.

Utilities Response 22:

- a. New and changing regulatory requirements will necessitate additional staff to support the increased workload, which in turn will necessitate additional Gas Distribution management positions. Personnel require the proper training, assistance, and access to the proper level of supervision to perform activities safely and efficiently. Please see Ex. SCG-04-R page GOM-6, line 16 GOM-7, line 29, for additional information regarding regulatory requirements.
- b. When SoCalGas fills job positions with internal personnel, eventually other positions will become vacant as a result of promotions, retirement, or lateral movement within the company that will require consideration of external candidates. SoCalGas uses a mixture of existing personnel and outside recruitment to fill job vacancies, according to the needs of the job and the qualifications of the candidate. SoCalGas does not utilize or calculate a proportion between internal and external hires.

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23. SCG-04 page GOM-91 presents the following table of capital expenditures:

Table GOM-34 Southern California Gas Company Capital Expenditures Summary of Costs

GAS DISTRIBUTION (In 2016 \$)				
Categories of Management	2016 Adjusted- Recorded (000s)	Estimated 2017 (000s)	Estimated 2018 (000s)	Estimated 2019 (000s)
A. New Business	44,220	36,632	45,313	50,393
B. Pressure Betterments	29,370	23,088	23,088	23,088
C. Supply Line Replacements	3,067	4,209	4,209	4,209
D. Main Replacements	32,282	33,711	33,711	33,711
E. Service Replacements	26,314	28,538	31,470	34,403
F. Main & Service Abandonments	8,662	9,256	10,522	11,787
G. Regulator Stations	8,635	8,636	14,636	19,436
H. Cathodic Protection Capital	5,462	6,320	8,434	9,511
I. Pipeline Relocations - Freeway	6,550	7,837	7,837	7,837
J. Pipeline Relocations - Franchise	13,319	17,894	17,894	17,894
K. Other Distribution Capital Projects & Meter Guards	4,781	3,656	11,596	11,596
L. Measurement & Regulation Devices	37,736	22,266	29,547	37,037
M. Capital Tools	9,665	14,386	14,220	12,322
N. Field Capital Support	66,609	61,317	70,292	74,618
O. Remote Meter Reading	4,664	727	2,032	0
Total	301,336	278,473	324,801	347,842

a. Please explain why Service Replacements are expected to grow from 26,314 in 2016 to 34,403 in 2019.

Utilities Response 23:

a. SoCalGas chose the five-year (2012 through 2016) linear trend to forecast the funding requirement for the years 2017 through 2019. Please refer to Ex. SCG-04-R, pages GOM-103-106 and Ex. SCG-04-CWP, pages 56-57 for further details.

b. Please explain why Supply Line Replacements are expected to grow from 3,067 in 2016 to 4,209 in 2019.

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Utilities Response 23 Continued:

b. SoCalGas estimated the expenditures for the years 2017 through 2019 based on the historical average of recorded expenditures for the years 2012 through 2016. Please refer to Ex. SCG-04-R, pages GOM-99-100 and Ex. SCG-04-CWP, pages 36-37 for further details.

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24. SCG-04-WP, page 57, presents the following table of Mains Maintenance expenditures:

Summary of Results:

		In 2016\$ (000) Incurred Costs									
		Adju	ısted-Recor	ded		Adjusted-Forecast					
Years	2012	2013	2014	2015	2016	2017	2018	2019			
Labor	8,314	8,747	10,163	8,491	9,377	12,569	15,001	12,717			
Non-Labor	4,988	1,026	5,940	4,517	2,006	8,838	11,308	8,054			
NSE	0	0	0	0	0	0	0	0			
Total	13,302	9,773	16,103	13,008	11,383	21,407	26,309	20,771			
FTE	89.9	91.7	107.1	90.7	99.0	138.7	168.8	139.9			

a. The tabled figures show considerable variation in the ratio of Labor to Non-Labor expenditures. How much of the variation is due to each of a) locations, b) asset type characteristics, c) other factors? Please explain

Utilities Response 24:

a. The variation in the ratio between Labor to Non-Labor expenditures is a result of the amount of damage credits received each year. Please refer to Ex. SCG-04-R, page GOM-52 and Ex. SCG-04-WP, pages 56, 58-60, 63, and 68 for further details.

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25. In SCG-04, page GOM-97 describes the forecast methodology for both Labor and Non-Labor, and notes that...

"Given the complexities in identifying specific pressure betterment projects, SoCalGas used the historical five-year (2012 through 2016) average of recorded Pressure Betterment expenditures to forecast the non-labor cost requirement for the years 2017 through 2019. Although, other forecast methods were considered including the five-year historical trend and base year, which resulted in higher forecast amounts, the five-year average was chosen as it more accurately captures yearly variations in system Pressure Betterment requirements."

- a. What factors are primarily taken into account when identifying specific pressure betterment projects? Please comment.
- b. Did Sempra consider a 9 or 10 year historical trend, as an alternative method? Please comment, and include whether and how the use of such a trend period affected (or could affect) the results.

Utilities Response 25:

- a. Pressure Betterment projects are performed in areas where there is insufficient capacity or pressure to meet load growth. This work category supports the risk mitigation associated with system reliability. Please refer to Ex. SCG-04-R, pp. GOM-96 GOM-98 and Ex. SCG-04-CWP page 27 for further details.
- b. SoCalGas objects to this request under Rule 10.1, on grounds that it seeks information that may be outside the scope of the TY 2019 GRC proceeding, is unduly burdensome, calls for speculation, and is unlikely to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, SoCalGas responds as follows: The requested information is outside the scope of the standard requirements described in the Rate Case Plan and is not available in an adjusted format that would allow for a like-kind comparison in this proceeding. SoCalGas' testimony and workpapers contain five years of historical data, 2012 through 2016, that has been reviewed and adjusted to align with the Rate Case Plan requirements. Because additional years prior to 2012 are irrelevant to the TY 2019 GRC's scope, they have not undergone similar review and adjustment and therefore, would be burdensome to create. SoCalGas declines to speculate on the impact of an analysis it has not performed.

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- 26. In SCG-04, page GOM-24, lists federal regulations for gas distribution that guide Sempra's risk management program.
- 49 C.F.R. § 192 Subpart M Maintenance: Patrolling, Leak Survey, Pressure
 Limiting and Regulator Station Inspections and Maintenance, Valve Maintenance
 intended to address Equipment Failure and Natural Forces;
- 49 C.F.R. § 192 Subpart N Qualifications of Pipeline Personnel: Training and procedures intended to address Incorrect Operations;
- 49 C.F.R. § 192 Subpart I Requirements for Corrosion Control: Corrosion control
 and monitoring intended to address corrosion; and
- 49 C.F.R. § 192 Subpart L Operations: Locate and Mark, Odorization, Emergency Preparedness, Continual Surveillance intended to address Equipment Failure, Incorrect Operations and Natural Forces.
- a. For test year 2019, how much of the proposed Gas Distribution capital expenditures are meant to address repairs and replacements attributable to each of i) Natural Forces, ii) Dig-Ins, and iii) Incorrect Operations? Please explain

Utilities Response 26:

a. SoCalGas does not categorize expenditures in a manner that exclusively separates the drivers of natural forces, operations, or dig-ins. Please see the testimony in Exhibit SCG-04-R, beginning at page GOM-8, for a summary of risk mitigation cost estimates for O&M and capital (RAMP-related costs). SoCalGas has identified risks that are associated with these estimates that include, but are not limited to, dig-ins and catastrophic failure of high-pressure and medium-pressure pipeline failures. Gas Distribution does not have any RAMP capital costs related to the RAMP dig-ins risk in its forecast for test year 2019. Moreover, testimony starting on page GOM-13, provides a detailed discussion of risk-mitigation forecast expenses as well as risk-associated cost forecasts for specific capital projects. For more information, see Exhibit SCG-04-CWP regarding capital projects and Table GOM-09 for all Gas Distribution capital-related RAMP items.

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27. SCG-04, page GOM-52, states that...

"In the TY 2016 GRC, SoCalGas committed to repairing an incremental 800 main leaks in 2015 and 1,600 main leaks every year starting in 2016 to reduce its inventory (also known as its "backlog") of pending non-hazardous leaks, and requested funding of \$2.02 million in TY 2016 (in 2013 dollars). Based on this data, for the TY 2016 forecast, the total leak repairs assumed to reduce the inventory for the period 2015 through 2018 was 5,600 leaks. In order to fulfill its TY 2016 GRC commitment as well as the settlement with the Environmental Defense Fund (EDF) to continue to work together in good faith to determine a plan of repair for the non-hazardous leak inventory SoCalGas has forecasted in this TY 2019 GRC an increase in the number of incremental leak repairs in 2017 and 2018 to 2,800 and 4,870, respectively for a total of 7,670 over this two-year period because the inventory has gone up since those assumptions were made in 2014. As such, anything incremental to those assumptions would require additional funding beyond the levels authorized in the TY 2016 GRC Decision (D.) 16-06-054. SoCalGas anticipates an incremental expense of approximately \$19.2 million over these two years to complete the incremental work."

- a. Please provide a table showing each of total leaks recorded, total hazardous leaks recorded, and total repairs, by year, from 2010 through 2016.
- b. Of the proposed \$19.2M, how much is for Mains leaks, and how much for Services or Supply Line leaks?
- c. How will the proposed repairs impact the annual volume of Unaccounted For Gas, over the GRC years? Please explain.

Utilities Response 27:

a. The table below shows the number of leaks found per year for 2010 through 2016.

	2010	2011	2012	2013	2014	2015	2016
Hazardous Leaks	7,290	7,265	6,698	6,839	7,509	7,614	7,381
Total Leaks Found	10,392	13,869	12,713	14,782	17,149	17,293	15,911

The table below provides the number of leaks repaired for the years 2010 through 2016.

	2010	2011	2012	2013	2014	2015	2016
Total Leaks Repaired	10,619	11,806	13,080	13,957	17,291	16,094	15,053

b. The \$19.2 million is for main leak repairs only.

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Utilities Response 27 Continued:

c. SoCalGas objects to this request pursuant to Rule 10.1 of the Commission's Rules of Practice and Procedure on the grounds that it seeks the production of information that is neither relevant to the subject matter involved in the pending proceeding nor is likely reasonably calculated to lead to the discovery of admissible evidence. The request seeks information that is outside the scope of this proceeding. LUAF volumes are authorized in SoCalGas' Triennial Cost Allocation Proceeding (TCAP), not as part of the scope of this TY 2019 GRC Application. See, e.g., D.16-10-004 (A.15-07-014). Subject to and without waiving the foregoing objection, SoCalGas responds as follows: SoCalGas did not forecast the annual volume of unaccounted for gas in relation to Gas Distribution's proposed leak repairs.

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28. SCG-04-CWP, page 201, presents the following table, showing routine capital tools and equipment expenditures:

Workpaper Group: 007250 - Capital Tools & Equipment - Routine

Summary of Results (Constant 2016 \$ in 000s):

Forecast	Method		Adju	Adjusted Forecast					
Year	s	2012	2013	2014	2015	2016	2017	2018	2019
Labor	5-YR Linear	3	- 0	1	9	13	14	17	20
Non-Labor	5-YR Linear	2,097	2,341	734	4,219	9,652	14,372	14,203	12,302
NSE	5-YR Linear	0	0	0	0	0	0	0	0
Tota	al	2,100	2,341	735	4,227	9,665	14,386	14,220	12,322
FTE	5-YR Linear	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2

a. Why does the forecast for 2017 increase significantly from the actual for 2016? Please explain, and in particular, with reference to costs associated with any tools slated for purchase in 2017 that are expected to be either notably expensive or very long-lived.

Utilities Response 28:

a. The primary reason for the increase starting in 2017 for this work category is three incremental elements that are not reflected in the base forecast: locate and mark tools, air space monitoring, and upgrading Nomex Coveralls. These three incremental activities are part of risk mitigation measures in support of two RAMP-related risks. Please refer to Ex. SCG-04-R, pages GOM-135-138 and Ex. SCG-04-CWP, pages 201-213 for additional details.

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- 29. SCG-04-WP, page 58, presents figures for Main Maintenance, for the years 2017 through 2019. The accompanying text says...
- "...SoCalGas has forecasted in this TY 2019 GRC an increase in the number of incremental leak repairs in 2017 and 2018 to 2,800 and 4,870 respectively for a total of 7,670 over this two-year period."
 - a. Please provide a table showing total Mains leaks repairs, by year, from 2010.
 - b. The FTE series shows an extra 29 personnel required during 2018 (compared to 2017 and 2019). How will Sempra source that added labor? Please explain.

Utilities Response 29:

a. Please see the table below with the number of main leaks repaired from 2010 – 2016.

	Main Leaks Repaired											
	2010 2011 2012 2013 2014 2015 2016											
Leaks Repaired	4,765	4,084	4,184	4,342	4,848	3,729	3,921					

b. SoCalGas utilizes a mix of resources to complete work across Gas Distribution categories, including, company personnel, overtime, and contract personnel. However, promotion, lateral movement within the company and retirement necessitate the need to consider outside candidates. Specifically, with regards to leak repairs, SoCalGas has mainly used company personnel working on straight time or overtime.

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- 30. SCG-04-CWP, page 28, describes the Pressure Betterment forecast process, and notes that... "Given the complexities in identifying specific pressure betterment projects, SoCalGas used the historical five-year (2012 through 2016) average of recorded Pressure Betterment expenditures to forecast the non-labor cost requirement for the years 2017 through 2019. Although, other forecast methods were considered including the five-year historical trend and base year, which resulted in higher forecast amounts, the five-year average was chosen as it more accurately captures yearly variations in system Pressure Betterment requirements."
- a. What factors are primarily taken into account when identifying and prioritizing specific pressure betterment projects? Please comment.
- b. Did Sempra consider a 9 or 10 year historical trend as an alternative method? Please comment, including whether and how the use of such a trend period would impact the forecast.

Utilities Response 30:

- a. Please see the response to Question 25.a.
- b. Please see the response to Question 25.b.