Capital Spending (New Business, Meters, and Regulators)

- 1. Regarding new meter set costs, shown on SCG-FBA-CAP-SUP-001 (SCG-CWP-04, p. 13):
 - a. Please provide data for 2009-2010 and 2014 similar to that shown for 2011-2013. If only part of 2014 data are available provide to the latest available month.
 - b. Please explain in detail why the cost of new meter sets increased from \$626 per meter in 2009 dollars in the 2012 forecast (as shown on 2012 GRC SCG-2, GOM-CWP-1) to \$847 (2013 dollars) in the 2016 GRC forecast. Identify any specific costs that were included in the recorded costs from 2011-13 used to develop the 2016 GRC forecast but were not included in the 2012 GRC forecast.

SoCalGas Response:

The GRC forecast was developed according to the Rate Case Plan, which does not contemplate the use of 2014 recorded data and the forecasts were not developed using that information. While that recorded data may indicate lower spending than forecasted in some areas, it may also indicate higher spending than forecasted in others. Although SoCalGas is providing that data in the spirit of cooperation, the utility is not permitted to revise its forecasts using that data, either up or down, once the application is filed.

- a. Please refer to the separately provided file, TURN-SCG-DR-08_Q1.
- b. Please note that after escalation to 2013 dollars, the cost per meter set used in the 2012 GRC forecast was \$769.

There are no differences in the types of costs included in the New Business Construction calculations in the 2012 GRC and the 2016 GRC. The cost per meter set is mainly driven by the type of work required to provide service to customers, including the mix of installations for residential, commercial, and industrial customers, as well as the amount, diameter, and material type of the main installed to reach new developments. This work varies from year to year.

Some differences that have contributed to a higher unit cost in recent years include:

- Increases in permit costs.
- Increases in paving costs.
- Doing more work with contract crews.
- An increase in the number of new customer homes with tankless water heaters. (Larger size service diameters are necessary to deliver the volumes required.)

2. Please provide actual costs of trench reimbursements and new business forfeitures for 2014.

SoCalGas Response:

The GRC forecast was developed according to the Rate Case Plan, which does not contemplate the use of 2014 recorded data and the forecasts were not developed using that information. While that recorded data may indicate lower spending than forecasted in some areas, it may also indicate higher spending than forecasted in others. Although SoCalGas is providing that data in the spirit of cooperation, the utility is not permitted to revise its forecasts using that data, either up or down, once the application is filed.

Please see the table below:

	2014 Actuals
	(Thousands of
	Constant 2013\$)
New Business Construction	\$30,653
New Business Trench Reimbursements	\$557
New Business Forfeitures	\$(5,337)
Total New Business	\$25,873

3. Please provide a continuity schedule of meters in inventory for 2009-2014, showing the number and dollar cost of each type of meter (1 to 3 and 4+ consistent with SCG-FBA-CAP-SUP-001) in inventory at the beginning of the year, the number and dollar cost of each type purchased, the number and dollar cost of each type installed, and the ending number and dollar cost.

SoCalGas Response:

The GRC forecast was developed according to the Rate Case Plan, which does not contemplate the use of 2014 recorded data and the forecasts were not developed using that information. While that recorded data may indicate lower spending than forecasted in some areas, it may also indicate higher spending than forecasted in others. Although SoCalGas is providing that data in the spirit of cooperation, the utility is not permitted to revise its forecasts using that data, either up or down, once the application is filed.

Meter Inventory:

The meters in inventory are not tracked by the type of installation, so a breakdown by new business and replacement meters in inventory is not available. The table below shows the <u>total</u> meters in inventory at the beginning of each requested year.

Meter Size	2009	2010	2011	2012	2013	2014
Size 1 - 3	65,140	39,354	26,501	52,247	51,533	55,015
Size 4+	1,697	1,836	2,045	1,984	2,334	5,651
Total	66,837	41,190	28,546	54,231	53,867	60,666

The inventory at the end of each year is equal to the inventory at the beginning of the following year.

The purchase cost of the meters in inventory is not readily available, as the purchase records for each meter would need to be manually researched.

Meter Installations and Purchases:

The number of meters purchased is not tracked by the type of installation. However, the breakdown by installation type can be <u>estimated</u> by assuming that the number of meters purchased for new business is equal to the number of meters installed for new business in the same year. The remaining meter purchases during the year were assumed to be meter replacements.

SoCalGas Response to Question 3, Continued:

For information on the number of new business meters installed and the estimated number of new business meter sets purchased in each year for 2009 - 2013, please refer to Exhibit SCG-04-CWP-R, page 171, Table 1:

	Historical New Business (NB) Meters					
	[A]	[B]	[C] ([A]-[B])			
	Total Historical NB Meter Sets	Historical Size 4+ NB Meters	Historical Size 1-3 NB Meters			
2009	31,828	1,522	30,306			
2010	26,585	1,065	25,520			
2011	18,764	1,301	17,463			
2012	21,898	1,510	20,388			
2013	26,787	2,036	24,751			

For information on the number of new business meters installed and the estimated number of new business meter sets purchased in 2014, please refer to the response to ORA-SCG-DR-064-DAO¹, Question 29:

The number of meters purchased is not tracked by the type of installation. An estimated breakdown of the meter purchases by installation type is shown in the table below. This is the same estimation method that was used for the historical meters in Supplemental Workpaper SCG-FBA-CAP-SUP-009 beginning at page 171 of the capital workpapers exhibit SCG-04-CWP_GDIST.

Meter Size	New	Historical PMCs and RMCs	Total
	Business	(Meters Purchased in 2014	Meters
	Meter Sets	Less New Meter Sets)	Purchased
Size 1 - 3 Meters	29,934	191,945	221,879
Size 4+ Meters	2,524	7,376	9,900
Total	32,458	199,321	231,779

¹ Separately provided in the file titled ORA-SCG-DR-064-DAO_Q29.pdf.

SoCalGas Response to Question 3, Continued:

Since the meter purchases are not tracked by the type of installation, a breakdown of the new business and replacement meter purchases is not available. The table below shows the <u>total</u> meters purchased each year and the purchase cost of those meters.

	Meter Size	2009	2010	2011	2012	2013	2014
Number of Meters Purchased	Size 1 - 3	166,876	185,152	182,556	134,384	109,180	221,879
	Size 4+	8,733	9,903	9,180	12,787	13,616	9,900
	Total	175,609	195,055	191,736	147,171	122,796	231,779
Cost of Meters Purchased (Thousands of 2013\$)	Size 1 - 3	\$12,969	\$11,684	\$11,193	\$8,548	\$8,554	\$14,694
	Size 4+	\$6,397	\$6,762	\$5,879	\$7,330	\$9,245	\$5,486
	Total	\$19,366	\$18,446	\$17,072	\$15,877	\$17,799	\$20,179

Please note that the table above does not include internal company costs associated with warehouse handling, evaluations, and quality assurance, as those are not tracked by meter type. For this reason, the dollars shown in the table above are not equal to the total historical dollars shown in the Meters workpaper (Exhibit SCG-04-CWP-R, page 163).

Data are not readily available on the cost of the meters that are installed in each year.

4. Workpaper SCG-FBA-CAP-SUP-009 page 2 of 2 (at SCG-04-CWP, p. 172 of 248) develops a 2013 labor and non-labor costs per meter for different types of meters in 2013. Please break out the "Recorded-Adjusted" figures for 2009-2012 given in 2013 dollars on SCG-04-CWP-166 into the same categories and unit costs shown for 2013 costs at page 2 of 2 of this workpaper. If costs increased by more than 10% in 2013 relative to the average of the costs that you calculate in 2009-2012 in real 2013 dollars, please provide a detailed narrative explanation for the increase.

SoCalGas Response:

Please refer to ORA-SCG-DR-011-DAO, Question 3. The referenced spreadsheet, ORA-SCG-DR-011-DAO.xlsx, is provided separately.

The weighted-average non-labor cost per meter varies from year to year due to changes in the mix of meter types that were purchased in each year.

The weighted-average labor cost per meter increased in 2013 due to the addition of incremental FTEs to handle increased meter repair, handling, and quality control.

5. Please confirm based on the information shown on SCG-FBA-CAP-SUP-010 (at SCG-04-CWP, p. 182 of 248) that the extra 100,000 regulators forecast to be purchased at the end of 2012 (per 2012 GRC GOM-CWP-8) and authorized in the 2012 GRC decision were not actually purchased in either 2012 or 2013. If you cannot confirm this information, please explain why you believe that those regulators were purchased at that time notwithstanding the figures shown on SCG-FBA-CAP-SUP-010. If you can confirm this information, please explain why the regulators were not purchased and explain why the project that allegedly required the additional regulators identified in the 2012 GRC was not pursued

SoCalGas Response:

The question states that an extra 100,000 regulators were forecast and authorized in the 2012 GRC decision. SoCalGas cannot confirm this, as the CPUC did not authorize SoCalGas' full capital forecast for Meters and Regulators. The Meters and Regulators Capital category included four workgroups, and a breakdown of the authorized amount was not provided at the workgroup level. Therefore, the 2012 GRC decision does not confirm whether the full 100,000 incremental regulators were included in the authorized amount. However, SoCalGas can confirm that Gas Distribution did not purchase the extra 100,000 regulators in 2012 or 2013. Instead, in 2012, Gas Distribution purchased approximately 6,300 incremental replacement curb regulators based on observed deteriorating conditions of the curb regulators.

The 100,000 incremental regulators included in the 2012 GRC forecast were forecasted to be approximately \$2 million (2013\$). The incremental curb regulators purchased in 2012 were approximately \$1.206 million (2013\$), or \$415,000 (2013\$) more than the 2012 GRC forecast for curb regulators.

6. Workpaper SCG-FBA-CAP-SUP-10 (at SCG-04-CWP, p. 182 of 248) develops 2013 labor and non-labor costs per regulator for different types of regulators in 2013. Please break out the "Recorded-Adjusted" figures for 2009-2012 given in 2013 dollars on SCG-04-CWP-177 into the same categories and unit costs shown for 2013 costs on this workpaper. If costs increased by more than 10% in 2013 relative to the average of the costs that you calculate in 2009-2012 in real 2013 dollars, please provide a detailed narrative explanation for the increase.

SoCalGas Response:

Please refer to ORA-SCG-DR-011-DAO, Question 4. The referenced spreadsheet, ORA-SCG-DR-011-DAO.xlsx, is provided separately.

The weighted-average non-labor cost per regulator varies from year to year due to changes in the mix of regulators that were purchased in each year.

Connected Meter Forecasts

7. Please provide Excel spreadsheets containing all quarterly historical and forecast data used by Ms. Payan to develop her forecasts of connected meters (including but not limited to SCG-30-WP pages 11-50).

SoCalGas Response:

On April 2, 2015 while in the process of responding to data requests on the customer forecast, Ms. Rose-Marie Payan (SCG-30) noticed a discrepancy in her workpapers' labeling of the Global Insight data for single family and multi-family housing starts. Upon doing more research, she noticed that the single family housing start data series contained the values for the multi-family housing start data and vice versa. SoCalGas has re-run the model that generated the residential forecast and has obtained new estimates and a new forecast for the residential sector based only on the correction to the data. No change has been made for the master meter sector, the commercial sector or the industrial sector. The change affects only the SoCalGas single family and SoCalGas multi-family segment forecasts. No corrections are necessary for the SDG&E customer forecast. SoCalGas has not determined whether it will correct its cost forecasts, and is not seeking to increase its revenue requirement at this time for this change.

The effects of correcting the data used to run the model regressions are as follows:

Over the GRC years covering 2016-2018:

- (1) Connected single family meters are now 0.4% lower
- (2) Connected multi-family meters will be 1.51% higher
- (3) The net effect generates an increase, on average, of 0.23% in connected meters over the GRC years of 2016 to 2018.
- (4) Active single family meters are 0.44% lower, on average, in the years 2016 to 2018.
- (5) Active multi-family meters are 1.52% higher, on average in the GRC forecast period
- (6) The net effect on active meters is an increase of 0.193% for the years 2016 to 2018
- (7) Several cost witness forecasts were understated as a result

For the specifics relating to this Question 7, please refer to the attached Excel spreadsheet, "TURN SCG-08_Question 7 Attachment.xls".

8. Please provide actual Connected meters on a quarterly basis, by category for 2014.

SoCalGas Response:

Please refer to "TURN SCG-08_Question 8 Attachment.xls".

9. Please provide in Excel format actual quarterly data for the variables contained on SCG-30-WP pages 11-50. Update these workpapers through the end of 2014.

SoCalGas Response:

Please refer to the attached Excel spreadsheet named "TURN SCG-08_Question 9 Attachment.xls".

10. Please provide SoCalGas's actual, forecast, and error terms for each of its statistical equations forecasting connected meters (residential single-family, residential multi-family, commercial, and industrial). Provide on an Excel spreadsheet.

SoCalGas Response:

Please refer to the attached Excel spreadsheet titled "TURN SCG-08_Question 10 Attachment.xls".

11. Please explain why SoCalGas used data starting in 1979 for its 2016 TY GRC forecast of connected meters, but starting in 1981-82 for its 2012 GRC forecast of connected meters.

SoCalGas Response:

The forecasts were prepared by different analysts at separate points in time.

12. Please explain why SoCalGas changed its forecasting method to use Housing Starts in 2016 versus Building Permits in 2012.

SoCalGas Response:

SoCalGas no longer subscribes to building permit data from the Construction Industry Research Board (CIRB). The CIRB got sold to another vendor and SoCalGas did not renew the subscription.

In general, a building permit may not translate to a new meter hookup. Housing starts, ultimately, are more likely to translate to a new gas meter hookup. For this reason, SoCalGas decided to utilize housing start data.

13. Does SoCal believe that any recorded figures for quarterly building permits contained in the 2012 GRC workpapers (SCG-30, SRW-WP-8) are inaccurate? If so, please provide recorded quarterly building permit figures to replace any figures that SoCal believes are not accurate in Mr. Wilder's 2012 GRC workpapers.

SoCalGas Response:

No, SoCalGas does not believe the recorded building permit figures used in the 2012 GRC were inaccurate. They were used as reported at the time by the Construction Industry Research Board.

14. Please provide recorded quarterly building permits for 2010-2014 divided into singlefamily and multi-family residential.

SoCalGas Response:

Permits were not used in the customer forecast; housing starts were used.

15. Please update recorded housing start data from the latest data used in Ms. Payan's workpapers in this GRC to end of 2014 or the otherwise latest available historical data.

SoCalGas Response:

See the accompanying Excel file "Turn SCG-08_Question 15 Attachment.xlsx".

16. Please identify the counties and municipalities included in the Housing Start forecast in 2016 and the Building Permit forecast in 2012. If the counties and municipalities were different, please explain why and provide building permit data for the 2016 definition of local governments, and housing start data for the 2012 definition of local governments.

SoCalGas Response:

For both forecasts, housing start and housing permit data were the sum of 12 counties: Fresno, Imperial, Kern, Kings, Los Angeles, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, Tulare, and Ventura. The difference is in the data sources. In the 2012 GRC, recorded housing permit data were from the Construction Industry Research Board (CIRB)--at the time an independent entity located in Burbank, California. To develop the forecast, growth rates from Global Insight's housing permit were applied to the CIRB recorded data. In the interim between the 2012 GRC and 2016 GRC work, CIRB was purchased by a larger entity, and SoCalGas no longer subscribes to CIRB. Instead, for the 2016 GRC, recorded and forecasted housing data were all taken directly from Global Insight.

17. Please identify the source of all forecast data (e.g, Global Insight, Moody's) used to forecast employment, housing starts, and other drivers of meter sets and the month(s) and year(s) when those forecast data were provided to SoCalGas.

SoCalGas Response:

SoCalGas drivers were housing starts and employment, all forecasted from Global Insight's February 2014 Regional forecast. (Recorded employment data came from the California Employment Development Department; the employment forecast was developed by applying Global Insight's forecasted year-over-year growth rates to the four 2014 quarters of recorded EDD data.)

18. Please identify all updates to each source of forecast data used to forecast employment, housing starts, and other drivers of meter sets that SoCalGas has received after the forecast that it used to develop its GRC filing and supporting testimony to date. Provide the information contained in each such update. Also provide building permit data to the extent available in each such update.

SoCalGas Response:

Global Insight's service agreement restricts SoCalGas from disseminating to third parties Global Insight proprietary forecasts unless they are used in SoCalGas' public regulatory proceedings. Global Insight updates its Regional forecast every month. In an effort to be fully responsive to this request, SoCalGas asked Global Insight for permission to provide the requested forecasts to TURN. Global Insight would not agree to permit SoCalGas to provide the forecast produced each month, but did agree to permit SoCalGas to provide the updated February 2015 forecast, even if SoCalGas was not going to rely on it. The accompanying Excel file (please see "Turn SCG-08_Question 18 Attachment.xlsx") contains employment and housing-start data based on Global Insight's February 2015 forecast, consistent with what SoCalGas used based on Global Insight's February 2014 forecast. Building permits were not used by SoCalGas in the 2016 GRC forecast and thus are restricted by Global Insight from being provided.

19. Please provide the actual percentages of inactive meters for the residential single-family and residential multi-family, commercial, and industrial classes on a quarterly basis from 2006-2014.

SoCalGas Response:

Please refer to the Excel file, "Turn SCG-08_Question 19 Attachment.xls".

20. Please provide the actual number of meter removes recorded in each quarter from 2006-2014.

SoCalGas Response:

Please refer to the attached Excel file named "Turn SCG-08_Question 20 and 21 Attachment.xls".

21. Please provide the actual number of seasonal meter resets recorded in each quarter from 2006-2014.

SoCalGas Response:

Please refer to the attached Excel file named "Turn SCG-08_Question 20 and 21 Attachment.xls".

22. Please provide any narrative explanations provided by the forecasting service(s) user by SoCalGas to explain or discuss changes in the number of housing starts and/or building permits over time, both in the forecast(s) used for the GRC and in any subsequent forecasts.

SoCalGas Response:

From IHS Global Insight's "Spring 2014" Metro Area reports (refers to February 2014 Regional Forecast, used in SoCalGas/SDG&E 2016 GRC testimony)

For Los Angeles-Long Beach-Santa Ana Super-Metro area (Los Angeles and Orange Counties): The badly battered Los Angeles housing market finally began to turn around in 2012. At the onset of the recovery, investors flooded Los Angeles and other formerly high-growth but recently high-distress areas eager to buy homes they now viewed as bargains. Investors concentrated particularly on the lower end of the market, buying homes for rental purposes. As a result of these purchases, home prices in Los Angeles rose rapidly and vacancy rates declined quickly. In recent months, investors have begun to pull back and home sales and home price appreciation have cooled off a bit. Despite the slowdown, however, homebuilding is ramping back up, especially in the multifamily sector. We expect the recent slowdown will be only temporary, and that the real-estate market in the area will continue to firm in coming quarters.

For Riverside and San Bernardino Counties:

The housing-market bust hit the Riverside-San Bernardino economy hard, with the construction sector in particular suffering massive job losses. Unemployment skyrocketed, reaching a high of 14.5% in mid-2010. During the housing boom, Riverside, seen as a bedroom community for unaffordable Los Angeles, was one of the areas favored the most by speculators, and as a result home prices and housing starts quickly rose to unsustainable levels. Once the bubble burst, the Riverside economy came crashing down. The local construction industry lost an average of 14.9% from its payrolls *annually* from 2007 to 2011, and housing starts fell from a peak of nearly 50,000 units in 2005 to just above 5,000 in 2011. In recent guarters, the housing market has been seeing some improvement, with starts and prices beginning to climb higher. In 2014, we expect growth in Riverside will begin to gather momentum, with payroll gains accelerating as the year progresses. More importantly, employment growth should become more broad-based, with all sectors, except "other services," adding jobs by the end of the year. The construction sector will be the clear winner, supported by the ongoing turnaround in the area's badly battered housing market. Still, despite the double-digit gains expected for the sector, by year-end construction payrolls will still be off more than 45% from their peak in 2006. Riverside is wellpositioned for the next several years as the national recession fades and the housing crisis turns around. The transportation and warehousing industry will be a major component of future growth; with 3.7% average annual payroll gains expected from 2015 to 2019, it will be one of the largest contributors to economic gains. Also significant will be the contribution of the professional/business services sector, which is expected to see payrolls grow 4.0% annually over

Response to Question 22 (Continued)

the period, on providing support to local corporations, particularly call centers and administrative jobs for the trade and transportation sector. Meanwhile, the construction sector will see a major rebound in 2014 and continue to see very strong growth over 2015-17, as the housing market recovers on the back of released pent-up demand.

IHS Global Insight Metro narratives for forecasts done in 2015 are not yet available.