

**TURN DATA REQUEST
TURN-SCG-DR-12
SOCALGAS 2012 GRC – A.10-12-006
SOCALGAS RESPONSE
DATE RECEIVED: JUNE 10, 2011
DATE RESPONDED: JULY 7, 2011**

1. Please provide SoCal's latest distribution capital budget.

SoCalGas Response:

Please see Exhibit SCG-02-CWP for SoCalGas' projection of distribution capital expenditures for 2011 and 2012.

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2. Regarding the New business budget (GOM-CWP-1)
- a. Please provide a narrative explanation as to why unit costs were higher in 2006-2007 than in 2008-2009.
 - b. Please update the chart on GOM-CWP-1 for 2010 actual meter sets and actual labor and non-labor inflation-adjusted costs.

SoCalGas Response:

- a. Unit cost is driven by a number of factors including the mix of customer type (residential- single family or multi-family, commercial, industrial), location density (urban, suburban, rural), amount of materials and facilities needed to provide service to customer or development (main extensions, header main, average service length), and company/contractor crew mix. During the 2006 and 2007 period when construction activities were higher, SoCalGas experienced an increase in contractor requirements to complete the added work elements and higher materials expenses responsive to facilities and infrastructure needs.
- b. The chart on GOM-CWP-1 has been updated for 2010 actual meter sets and actual labor and non-labor inflation-adjusted costs and is shown below.

Forecast Using Meter Set Quantity								
	Direct Costs (Actuals Inflation Adjusted)			New Sets	Cost Per Set			
	Total	Labor	Non-Labor		Labor	Non-Labor	Total	
2005A	46,772,516	13,155,000	33,617,516	81,473	161	413	574	Actual
2006A	60,018,331	13,890,000	46,128,331	84,613	164	545	709	Actual
2007A	48,733,930	14,181,000	34,552,930	65,286	217	529	746	Actual
2008A	23,801,754	10,029,000	13,772,754	45,835	219	300	519	Actual
2009A	14,095,902	6,957,000	7,138,902	31,828	219	224	443	Actual
TTLs/Avg	193,422,432	58,212,000	135,210,432	309,035	188	438	626	5 year average
2010A	11,631,000	5,692,000	5,939,000	26,585	214	223	438	Actual
2011E	34,734,484	10,453,616	24,280,868	55,496	188	438	626	GRC Forecast
2012TY	40,557,154	12,205,994	28,351,160	64,799	188	438	626	GRC Forecast

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3. Regarding trench reimbursement costs (GOM-CWP-3):
- a. Please explain why these costs were higher in 2007 than in other years.
 - b. Please provide actual trench reimbursement costs in 2010.
 - c. Please provide the number of units where the customer provides the trench and where the utility provides the trench for each year from 2005-2010.

SoCalGas Response:

- a. Line extension activity in 2006 up to mid-2007 was at its peak with most applicants providing trench to expedite construction and their housing market goals. Subsequently, trench reimbursements were increased due to the volume of work and the energizing of new gas meters associated with these installations. The trench valuation is negotiated between SoCalGas and the applicant with a majority of the trench reimbursement at \$1/lineal foot of trench. Therefore, the increase in installed gas main/service footages and the high meter activation rate which realized the associated allowance corresponds with an increase in trench reimbursements in 2007.
- b. 2010 actual trench reimbursement costs stated in 2009 dollars were \$719,000.
- c. SoCalGas has interpreted the request for “units” as reference to the number of events/jobs/projects where SoCalGas and the applicant perform trenching. It does not correspond to residential dwelling units. The following table represents the total number of new business construction projects/jobs per year involving trenching exclusively for either main, stubs, and/or services. Meter only projects/contracts are not captured as no trenching is required.

New Business Construction Projects Involving Trenching

YEAR	Total Projects	Trenching by Applicant and SoCalGas	Trenching by Applicant Only	Trenching by SoCalGas Only
2005	12,502	1,584	7,477	3,441
2006	12,380	1,801	6,686	3,893
2007	10,148	1,393	5,238	3,517
2008	7,452	1,005	3,885	2,562
2009	5,082	533	2,998	1,551
2010	4,496	420	2,794	1,282
2011	1,938	165	1,211	562

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4. Regarding forfeitures (GOM-CWP-4):
- a. Please provide a narrative description of the timeline when customer advances for construction are no longer deemed refundable.
 - b. Provide any data on the vintages of customer advances for construction as issued and refunded in each year from 1999-2009. We are providing a chart (the recorded data at the top of the page) prepared by Southern California Edison in its General Rate Case to provide guidance in the type of information we are attempting to obtain.
 - c. Is the average in real or nominal dollars? If in nominal dollars, please explain why, given that forfeitures are for newer and more expensive projects every year.
 - d. Please discuss the impact of the decrease in allowances and resulting increase in advances in 1998 on the rate of forfeitures in later years relative to earlier years of the 2005-2009 period.
 - e. Please identify the amount of new business forfeitures in 2010.

SoCalGas Response:

- a. The following excerpts from SoCalGas' Tariff Rules 20 – Gas Main Extensions and 21 – Gas Service Extensions describe the timeline when customer advances for construction are no longer deemed refundable.

Rule 20 - Gas Main Extensions:

Section E.3, Refund Period. The total refundable amount is subject to refund for a period of ten (10) years after the extension is first ready for service.

Section E.8, Maximum Refund. No refund shall be made in excess of the refundable amount nor after a period of ten (10) years from the date the Utility is first ready to serve. Any unrefunded amount remaining at the end of the ten (10) year period shall become the property of the Utility.

Rule 21 - Gas Service Extensions:

Section E.5, Refunds. No refunds apply to the installation of Gas Service Lateral under this Rule.

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SoCalGas Response to Question 4 (Continued):

- b. See attached file summarizing refunds by vintage years 1999 to 2009.



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b.pdf

- c. With respect to the spreadsheet provided in response to question 4b above, all refunds are stated in vintage year dollars (i.e., the year the advance was received).
- d. The impact of a decrease in allowances granted for the purpose of new business line extension contracts would result in an increase in advances collected at the time the contracts are executed. However, the impact on the forfeiture rate is unknown and cannot be ascertained as there are a number of factors, throughput being the main driver, that determine forfeitures and their rate of occurrence.
- e. New business forfeitures for 2010 totaled \$12,331,178 and are stated in nominal dollars.

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5. Please provide the most current estimates of schedule and cost for the Twenty-nine Palms project (GOM-CWP-5).

SoCalGas Response:

As SoCalGas received more information from the Marine Base, the scope of the Twenty-nine Palms project changed and impacted the cost estimate and collectability. The 2010/2011 portion of the project was completed and placed into service as of May 2011. Most of the charges have been recorded; however, contractor and other charges are still in the process of being paid. The Camp Wilson line extension originally planned in 2012 is now projected to go forward in 2013.

Update: Marine Corp Air Ground Center in Twenty Nine Palms (Budget Code 153)

Project Costs (\$000 in 2009\$)	Prior Years	2009 A	2010 A	2011 F	2012 F	Remaining Years	TOTAL
Direct Labor			35	120			155
Direct Non Labor			369	4,480		3,500	8,349
Total Direct Capital			404	4,600		3,500	8,504
Collectible			0	0		0	0
Net Capital			404	4,600		3,500	8,504
FTE			.4	1.4			1.8

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6. Regarding meters and gauges (GOM-CWP-6 and 7):
- a. Please provide the number of meters purchased in each year from 2005-2010.
 - b. Please provide recorded costs in 2010 (labor and non-labor).
 - c. Please provide the number of actual new meter sets and meter replacements in each year from 2005-2010.
 - d. Please provide a narrative description of the basis for the forecast of meter replacements and any quantitative calculations made by SoCal to obtain the forecast.

SoCalGas Response:

- a. Meters **Purchased** 2005-2010 are shown in Table DR-6.1.

Table DR-6.1

	2005	2006	2007	2008	2009	2010
Meters Purchased	298,527	322,437	258,976	209,063	188,809	198,341

- b. 2010 recorded cost (labor and non-labor) are shown in Table DR-6.2.

Table DR-6.2

2010 Actuals
Shown in Thousands of 2009 \$

Labor	\$ 457
Non Labor	\$15,480
Total	\$15,937

- c. Actual New Meter Sets and Meter Replacements are shown in Table DR-6.3.

Table DR-6.3

	2005	2006	2007	2008	2009	2010
New Meter Sets	81,473	84,613	65,286	45,835	31,828	26,585
Meter Replacements	214,913	204,899	172,405	172,861	177,287	182,396
Total Meters	296,386	289,512	237,691	218,696	209,155	208,981

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SoCalGas Response to Question 6 (Continued):

- d. As referenced in the Testimony of Gina Orozco-Mejia (Exhibit SCG-02, page GOM- 80, lines 3- 6):

Meters are also purchased for replacements resulting from company or customer identified problems due to meter accuracy, age, or operation; or on a pre-determined replacement cycle based on meter capacity, size, and meter class performance. The forecast for small meter activity reflects SoCalGas' endeavor to replace 180,000 small meters each year as authorized by the Commission.

For small meter replacements, please refer to Mr. Ed Fong's testimony, Exhibit SCG-07, p. EF-22, lines 9-26, p. EF-23, line 1-11, and p. EF-24, lines 1-6, for a description of the basis of the forecast for the customer service field meter replacements. The replacements of medium and large meters are prescribed by SoCalGas' meter and regulator data and scheduling system. To be in compliance with CPUC General Order 58-A, meters are either subject to periodic change-out or accuracy testing at the customer site at intervals not to exceed 10 years from installation date. Scheduled replacement of these meters and/or replacement of meters which are found to be out of acceptable accuracy tolerance upon field testing drives larger meter forecast. Meters which experience field failures and/or are no longer appropriate for the amount of gas delivered round out the large meter replacement forecast.

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7. Regarding regulators (GOM-CWP-8 and 9):
- a. Please provide a narrative description of the basis for the forecast of new regulator installations and any quantitative calculations made by SoCal to obtain the forecast.
 - b. If not provided in part (a), please reconcile the number of new business regulators to SoCal's forecast of new meter sets in SCG-30.
 - c. Please provide a narrative description of the basis for the forecast of regulator replacements and any quantitative calculations made by SoCal to obtain the forecast.

SoCalGas Response:

- a. Table DR-7.1 provides a summary of all regulator purchase quantities by category. See Item "v" for new business quantities for the forecast period. Total regulator purchases for new business were forecast in direct proportion to new business meter purchases for years 2010-2012; with 2009 recorded purchases providing the base year for establishing the ratio of regulator purchases to meter purchases for new business (approximately 53.6%.)

For 2009, new business meter purchases totaled 31,828. The associated new business regulator purchase quantity recorded was 17,045 (see Table DR-7.1, Item "v", Year 2009 Recorded column.) The ratio between these two numbers is 53.55%. The new business meter counts shown in Table SCG-GOM-30 and replicated below as Table DR-7.2 represents the meter quantities upon which new business regulator purchases were forecast for years 2010-2012. There were some minor adjustments due to large regulator purchases. The new business regulator totals in years 2010 through 2012 represent 53.3% of all forecasted new business meter quantities and are shown under Item "v" in Table DR-7.1 for years 2010-2012.

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SoCalGas Response to Question 7a (Continued):

Table DR-7.1

Regulator Counts Unless Noted As Percentages		YEAR			
		2009 Recorded	2010 Forecast	2011 Forecast	2012 Forecast
Item					
a	New Small (2009 Base)	15,495	15,495	15,495	15,495
b	New Bus Growth Small - From Prior Year	-	6,663	4,852	4,528
c	New Small Prior Year Total		15,495	22,158	27,010
d	Total New Business Small Current Year (b+c)	15,495	22,158	27,010	31,538
e	% Change New Business Small From Prior Year (b/c)		43%	22%	17%
f	New Large (2009 Base)	1,550	1,550	1,550	1,550
g	New Bus Growth Large - From Prior Year	-	556	462	430
h	New Large Prior Year Total		1,550	2,106	2,568
i	Total New Business Large Current Year (g+h)	1,550	2,106	2,568	2,998
j	% Change New Business Large From Prior Year (g/h)		36%	22%	17%
k	Replace Small (2009 Base)	66,562	66,562	66,562	66,562
l	Replace Small Regulator Integrity Growth - From Prior Year			17,000	100,000
m	Replace Small Prior Year Total+Inventory Adjustment	(24)	66,538	66,538	83,538
n	Total Replace Small Current Year (l+m)	66,538	66,538	83,538	183,538
o	% Change Replace Small From Prior Year (l/m)		0%	26%	120%
p	Replace Large (2009 Base)	7,065	7,065	7,065	7,065
q	Dist Reg Station Replacement Large - Above Prior Year		-	334	-
r	Replace Large Prior Year Total		7,065	7,064	7,398
s	Total Large Replace Current Year (q+r)	7,065	7,065	7,398	7,398
t	% Change Replace Large From Prior Year (q/r)		0%	5%	0%
u	Total All Replacements (n+s)	73,602	73,602	90,936	190,936
v	Total All New (d+i)	17,045	24,264	29,578	34,536
	Total All Regulator Purchases (u+v)	90,647	97,866	120,514	225,472

Table DR-7.2

**Gas Distribution Capital
New Business Meter Installation Forecast**

Year	No. of Meters
2010	45,526
2011	55,496
2012	64,799

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SoCalGas Response to Question 7 (Continued):

- b. Table SCG-GOM-30 in Exhibit SCG-02 (and Table DR-7.2 above) shows the forecasted new meter set installations for the years 2010 to 2012. These forecasts were used to derive new regulator activity as described in the response to Question 7a.

Based on 2009 experience, new business regulators represent approximately 53% of the new business meters sets. As can be seen in Table DR-7.3 below, for example, 2010 forecasted new business regulators are 53.3 % of new business meter sets. Forecasted new business regulators remain at 53.3% of forecasted new meter sets for the years 2011 and 2012, as well.

Table DR-7.3

a	b	c
2010 Forecasted New Business Meter Sets	Regulators Percentage of New Business Meters	2010 Forecasted New Business Regulators c=(axb)
45,526	53.3%	24,264

New Meter Sets (“No. of Meters”) in SCG-GOM-30 is calculated by taking the net gain in the number of connected meters, subtracting the number of meters re-set, and adding the number of meters removed as follows:

$$\text{New Meter Sets} = \text{Net Connected Meter Gain} - \text{Meters Reset} + \text{Meters Removed}$$

Table SCG-SRW-1 in Exhibit SCG-30 shows the average annual total “Active Meters.” The yearly increases calculated from Table SCG-SRW-1 show the change in Active Meters, which is not equal to the new meter set installations. New meter sets are calculated based on the change in connected meters, which includes both active and inactive meters.

$$\text{Active Meters} = \text{Connected Meters} - \text{Inactive Meters}$$

Table DR-7.4 shows the data that was used to calculate the forecasted new meter set installations shown in Table SCG-GOM-30. This meter data can be found in Exhibit SCG-30-WP, page SRW-WP-11.

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SoCalGas Response to Question 7b (Continued):

Table DR-7.4

Year	Qtr	NetCG ¹	ReSets ¹	ReMoves ¹	NewSets ^{1 2}	New Meter Sets Per Year
2010	1	11,779	2,513	3,462	12,728	45,527
2010	2	9,128	2,451	3,468	10,145	
2010	3	10,548	2,256	3,474	11,766	
2010	4	10,198	2,790	3,480	10,888	
2011	1	12,619	2,539	3,488	13,568	55,495
2011	2	12,911	2,479	3,496	13,928	
2011	3	13,045	2,286	3,504	14,263	
2011	4	13,046	2,821	3,511	13,736	
2012	1	14,912	2,571	3,520	15,861	64,799
2012	2	15,217	2,512	3,529	16,234	
2012	3	15,473	2,321	3,539	16,691	
2012	4	15,323	2,858	3,548	16,013	

Variable Definition (Found in Exhibit SCG-30-WP, Page SRW-WP-1)

NetCG	Net Connected Meter Gain
NewSets	New Meter Sets
ReMoves	Meters Removed
ReSets	Meters Re-set

¹Quarterly totals can be found in Exhibit SCG-30-WP, Page SRW-WP-11.

²**New Meter Sets Calculation: $\text{NewSets} = \text{NetCG} - \text{ReSets} + \text{ReMoves}$**
(Formula can be found in Exhibit SCG-30-WP, Page SRW-WP-6.)

Note: Table totals differ from Table DR-7.2 due to rounding.

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SoCalGas Response to Question 7 (Continued):

- c. Table DR-7.1 provides a summary of all regulator purchase quantities and is referenced in the following discussion.

Small regulator replacement forecasts were established by using customer service regulator removals in 2009 (66,562) as a baseline (See Item “k”, Column 2009 Recorded). An additional 17,000 regulator purchases are shown in 2011 and 2012 (see Item “l”, years 2011 and 2012) to support increased small regulator replacements in those years due to infrastructure aging. An additional 100,000 small regulators will be purchased in the final quarter of 2012 to support 2013 installations as part of an enhanced regulator infrastructure upgrade which will extend through 2017.

Large regulators to support on-going replacements were based on 2009 recorded regulator replacement activity. This total was increased by 334 in 2011. This increase was associated with a five-year, programmatic regulator station rebuild program starting in that year (a total of 1,668 regulators are targeted for change-out) and carrying through the year 2012, to support aging infrastructure at SoCalGas’ district regulator stations and the subsequent need for activity above the baseline 2009 replacements levels.

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8. Regarding Electronic Pressure measurement (GOM-CWP-10 and 11):
- a. Please provide the number of units installed each year from 2005-2010 recorded and the cost in 2010 recorded.
 - b. Please explain why 2005 costs were so much higher than other years.
 - c. Please identify the new historical ratio in SoCal’s forecast.

SoCalGas Response:

- a. The number of new Electronic Pressure Corrector units installed from 2005-2010 are shown in Table DR-8.1.

Table DR-8.1

New Installations	2005	2006	2007	2008	2009	2010
Technology Upgrade	1165	0	0	0	0	0
Instruments - New MSAs	123	116	130	98	69	43
Total Installed	1288	116	130	98	69	43

Total 2010 labor and non-labor recorded costs are shown in Table DR-8.2.

Table DR-8.2

**Electronic Pressure Correctors
2010 Actuals
Shown in Thousands of 2009 \$**

Labor	\$ 41
Non Labor	\$37
Total	\$78

- b. Referring again to Table DR-8.1; year 2005 data reflects purchases (1,165 units) made in the final year of a five-year programmatic “Technology Upgrade” of obsolete mechanical pressure correctors. Subsequent years do not include these purchases.
- c. It is not clear what is precisely being requested by TURN in this question. SoCalGas offers the following in response to what it believes to be spirit of the question: New electronic gas measurement device installations historically represent approximately 0.17% of new meter set installations and were forecasted as such for years 2010-2012.

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9. Regarding gas pressure betterment (GOM-CWP-17ff.)
- a. Please provide historical gas pressure betterment project spending from 1996-2004 in nominal and constant dollars.
 - b. Please provide a narrative explanation as to why expenditures on betterment projects were so much higher in 2006 than in other years from 2005-2009.
 - c. Is there any relationship between pressure betterment and gas demand added to the system or the number of gas customers added to the system? Please explain.
 - d. Please provide actual system betterment spending for 2010.
 - e. Please provide the most current list of “specific pressure betterment projects and the estimated year in which the projects will need to be constructed.”
 - f. Please identify the incremental costs of permitting in Sediment Sensitive Watersheds actually experienced in 2010 (with permits starting July 1, 2010).
 - g. Please provide the calculation of the five-year average number of projects needing the water quality permit, including the number in each year.

SoCalGas Response:

SoCalGas does not recognize the page referenced in TURN’s question 9. However, in an attempt to respond SoCalGas has interpreted this question to reference Pressure Betterment Exhibit SCG-02-CWP 18-19.

- a. The tables below display capital expenditures in Pressure Betterment in both nominal (dollars of the year) and real (2009 dollars) terms. For consistency with the data provided in the GRC TY2012 Application, a factor of 17.865% was added to the recorded data representing the average of 2005 - 2010 V&S factor from the GRC.

With V+S, Dollars of the year in '\$000										
Source		RO table from 2004 COS (Essbase)				BW Queries				
BC 251 Pressure Betterment		1996 A	1997 A	1998 A	1999 A	2000 A	2001 A	2002 A	2003 A	2004 A
	labor	272	193	200	353	434	329	356	364	536
	nonlabor	4,186	1,450	1,861	3,982	5,630	3,533	7,343	9,673	8,458
	Total	4,417	1,614	2,031	4,282	5,998	3,813	7,644	9,982	8,912

With V&S, in 2009 dollars and in '\$000										
Source		RO table from 2004 COS (Essbase)				BW Queries				
BC 251 Pressure Betterment		1996 A	1997 A	1998 A	1999 A	2000 A	2001 A	2002 A	2003 A	2004 A
	labor	490	341	349	600	712	533	564	559	715
	nonlabor	7,547	2,556	3,240	6,774	9,242	5,722	11,653	14,857	11,279
	Total	8,037	2,897	3,589	7,374	9,953	6,255	12,217	15,416	11,994

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SoCalGas Response to Question 9 (Continued):

- b. Pressure Betterment expenditures vary from year to year, depending on where new load is added in the system, and whether that part of the system is approaching its maximum capacity. A review of the historical spending in this activity showed no specific large projects in 2006 that contributed to the higher level of spending that year that might have lead to the higher spending.

It is because of this variation that SoCalGas based the Pressure Betterment forecast for 2011 and 2012 on a five-year historical average.

- c. Pressure Betterment work is indirectly related to gas demand and the number of customers added to the system; however, as stated in the response to part b of this question, the need for Pressure Betterment depends on where that load is added to the system. If new load is added to the system in an area with available capacity, no new Pressure Betterments are necessary. If, on the other hand, the new load is added in an area that has limited capacity available, Pressure Betterment will likely be required.

This is discussed in Exhibit SCG-02, page SCG-65:

Pressure Betterment projects are performed in areas where there is insufficient capacity or pressure to meet load growth.

Pressure Betterment projects are necessary to maintain reliable service to existing customers as new load is added to the gas distribution system. Once a pipeline system is designed and installed, the available capacity remains relatively fixed. However, as load increases over time due to population expansion or increased density as well as larger businesses, the existing pressure decreases which reduces the available capacity for customers. If the diminishing pressure is not addressed, gas service to customers could be interrupted.

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SoCalGas Response to Question 9 (Continued):

- d. 2010 actual system betterment spending is shown below.

**Pressure Betterment
2010 Actuals
Shown in Thousands of 2009 \$**

Labor	\$ 299
Non Labor	\$9,042
Total	\$9,341

- e. Please see the attached list of known Pressure Betterment projects in progress as of June 2011 with their estimated completion dates.



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u9e-Pressure Betterment

Please note that these projects, project details, and timing may change. As stated in Exhibit SCG-02, page GOM-65:

... Because SoCalGas' gas infrastructure is a large dynamic system of pipelines, with continual changes in customer load, it is difficult to identify and estimate specific betterment projects more than a year into the future.

- f. SoCalGas has historically recorded its costs for capital work by cost center and budget category corresponding to the major activity completed. State Water Resources Control Board's General Permit for Storm Water Discharges Associated with Construction Activity is a factor influencing the total cost of completing Pressure Betterment projects. The expense associated with each factor that may influence a single activity has not been tracked separately, or at a level of specificity sufficient to produce a detailed historical report.

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SoCalGas Response to Question 9 (Continued):

- g. SoCalGas used the following methodology to calculate the incremental cost increase related to the revised State Water Resources Control Board's General Permit for Storm Water Discharges Associated with Construction Activity.

Step 1: Identify historic construction projects evaluating number, duration, size (between 1 and 5 acres and greater than 5 acres), and existing construction stormwater permit used.

Step 2: Identify the projects currently permitted under Tier I of the State Water Resources Control Board (SWRCB) Linear Underground / Overhead Utility Permit (Order 2003-0007) as Tier I projects. These projects are assigned Type 1 risk under the new permit

Step 3: Identify the amount of company assets within Sediment Sensitive Watersheds (SSWS) using the company's mapping system. The percentage of Gas Distribution pipelines located within SSWSs is applied to the total number of projects currently permitted under the SWRCB Stormwater Construction General Permit (Order 99-08) to estimate the number of projects that would be a risk Type 3. The percentage of Gas Distribution pipelines located outside SSWSs is applied to the total number of projects currently permitted under the SWRCB Stormwater Construction General Permit (Order 99-08) to estimate the number of projects that would be a risk Type 2. One risk Type is applied to the entire project.

Step 4: Use the number of estimated projects in each risk Type (1, 2 and 3) to calculate incremental upward pressure for requirements of the new Stormwater Construction General Permit by applying number of projects per risk Type.

Please see the attached file showing the number of projects started in each year, the average number of on-going project in each year, and the five-year (2005 – 2009) average number of projects.



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u9g-StormwaterPerm

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10. Regarding Gas Instrument Replacements (GOM-CWP-12 and 13):
- a. Please provide actual spending in 2010 divided into labor and non-labor.
 - b. Please provide more information on the forecast number of units and cost per unit in 2010-2012. Specifically explain why the unit cost more than doubled in 2012.

SoCalGas Response:

- a. 2010 actual spending (labor and non-labor) is shown in Table DR-10.1.

Table DR-10.1

2010 Actuals
Shown in Thousands of 2009 \$

Labor	\$ 63
Non Labor	\$245
Total	\$308

- b. Replacement units are forecasted based on programmatic instrument change-outs premised on anticipated instrument life (approximately 10 years) and random instrument failures. These “units” can vary in complexity from a simple pressure corrector replacement to the rebuild of a large metering site, including the replacement of gas chromatograph, transmitters, flow computer and related components. The range of non-labor costs for parts and installation material for these replacement categories are shown in Table DR-10.2 along with the quantities of each replacement category used to derive the associated cost forecasts.

These unit costs were based on the installation of comparable equipment in prior years. Unit costs increase significantly in 2012 because the forecasted plan is to rebuild five of SoCalGas’ largest, more complex and expensive measurement sites in that year due to age and obsolescence.

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SoCalGas Response to Question 10b (Continued):

Table DR-10.2

Unit Type	Non-labor Cost Each	Units		
		2010	2011	2012
Low Cost GV Corrector	\$1,104	85	59	56
M Corrector 1	\$1,146	51	50	50
M Corrector 2	\$1,938	50	50	50
Flow Computer	\$6,590	8	5	9
Large MSA Electronics Upgrade	\$53,000	1	1	1
Large MSA Rebuild	\$144,000	1	1	5
Total		196	166	171

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11. Regarding Electronic Pressure Monitors (new and replacement - GOM-CWP-14 through CWP-17):
- a. Please identify all O&M savings from conversion from paper charts to electronic devices. Explain where they are included in the distribution budget.
 - b. Please identify the number of EPMs in service on SoCal’s system at the beginning of 2005 and at the end of each year from 2005-2010; the number purchased in each year from 2005-2010, and the number of failed or damaged EPMs in each year from 2005-2010.
 - c. Please identify the labor and non-labor actual cost in 2010.
 - d. Please identify the number of non-EPM charts that could be subject to EPM replacement in the future at the beginning of 2005 and the end of each year from 2005-2010.
 - e. Please explain the extremely rapid increase in the forecast of the number of failed or damaged EPMs.

SoCalGas Response:

- a. New electronic gas pressure monitor devices are purchased to replace an obsolete form of pressure monitoring technology (mechanical recording gauges). Also, because EPMs provide near real-time alarming of pressure excursions, possible operational issues are promptly identified and personnel are more rapidly dispatched. Thus the project to conduct this replacement was not based on an O&M savings evaluation. As a result, no O&M savings were included in the distribution budget.
- b. The following table provides the number of EPM units in service at the beginning of the year shown in the left column, number of units purchased during that year, and number of units requiring replacement due to failure or damage.

	In Service @ Beg. Of Yr	Units Purchased	Failed or Damaged
2005	440	64	9
2006	504	91	14
2007	565	171	19
2008	695	32	13
2009	708	54	20
2010	762	200	12
2011	862	n/a	n/a

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SoCalGas Response to Question 11 (Continued):

- c. The labor and non-labor actual cost in 2010 associated with the installation of EPM units is provided in the following table:

Shown in 2009 Dollars

	2010 - Labor (\$000)	2010 - NonLabor (\$000)	2010 - Total (\$000)
New EPMS	96	305	401
EPM Replacement	0	44	44
Total	96	349	445

- d. The number of non-EPM charts that could be subject to EPM replacement is provided in the following table:

In Service as of:	Non-EPM Charts
1/1/2005	1972
12/31/2005	1908
12/31/2006	1847
12/31/2007	1717
12/31/2008	1704
12/31/2009	1653
12/31/2010	1522

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SoCalGas Response to Question 11 (Continued):

- e. SoCalGas started deploying EPM devices in the mid-1990's. Since the average useful life of an EPM is approximately 10 years, SoCalGas would expect to see the number of failures to grow around the 10th year of service. Therefore not until around the year 2005 would one expect to start recording many EPM failures. By year-end 2012, SoCalGas expects to have over 1,100 EPMs in service. By this time, SoCalGas expects that approximately 111 of these EPMs will have been in service for over 10 years and will have a higher probability of failure. Once SoCalGas reaches a steady state population of EPMs, over the long term the Utility can expect to replace approximately a 10th of the units each year.

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12. Regarding Distribution Pressure Betterment (GOM-CWP-18 and 19):
- a. Please provide actual spending from 2000-2004 in 2009 dollars divided into labor and non-labor.
 - b. Please provide actual spending in 2010 in 2009 dollars divided into labor and non-labor.
 - c. Please provide any analysis conducted by SoCal correlating betterment spending with either (a) spending on new business; (b) meter sets; or (c) changes in demand.

SoCalGas Response:

- a. See response to Question 9 a
- b. 2010 actual spending in 2009 dollars for Pressure Betterment is shown below.

Pressure Betterment
2010 Actuals
Shown in Thousands of 2009 \$

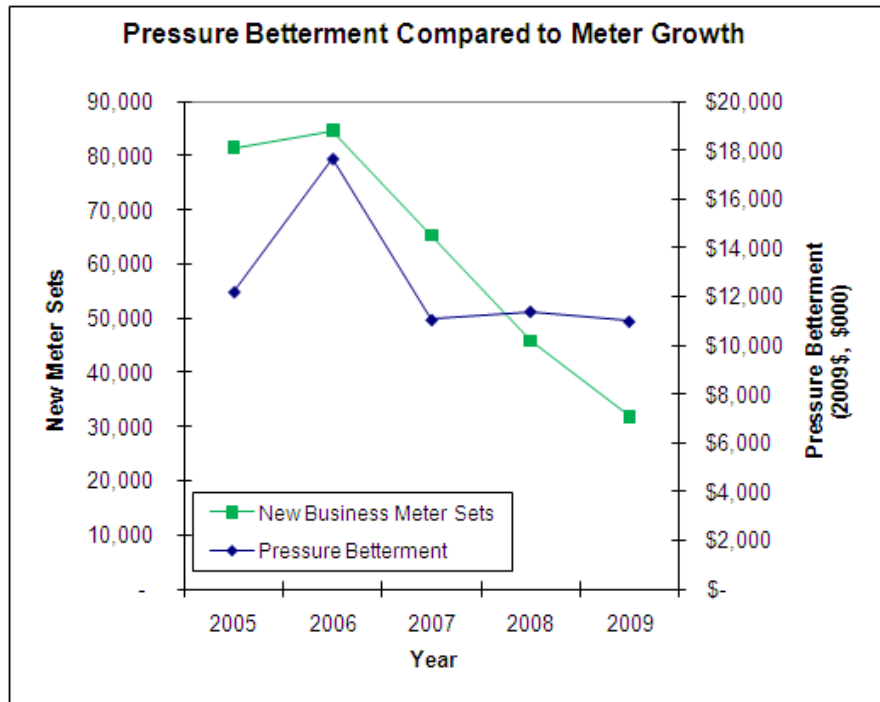
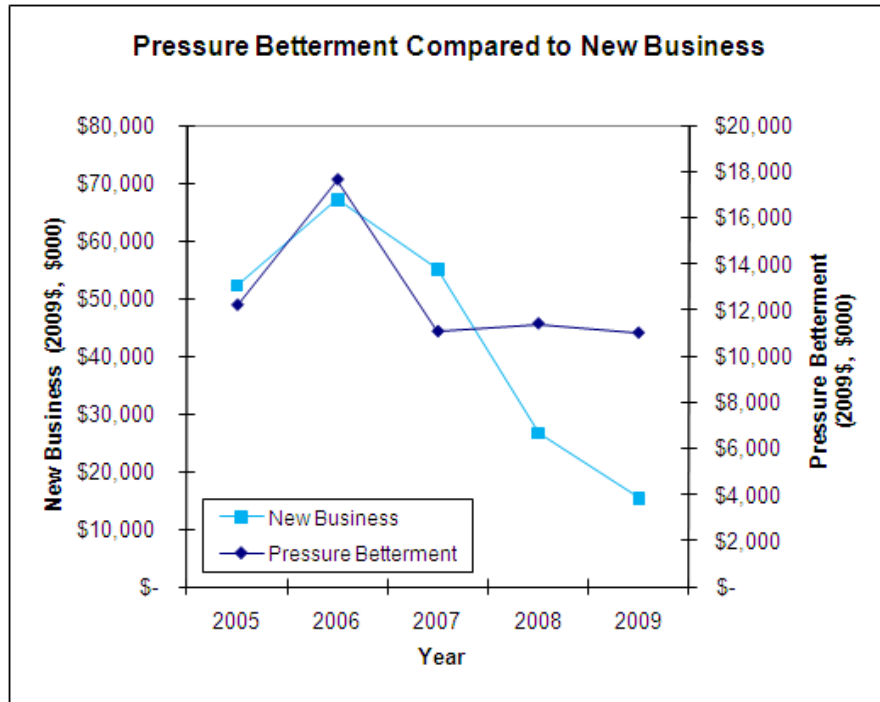
Labor	\$ 299
Non Labor	\$9,042
Total	\$9,341

- c. SoCalGas did not complete any formal analyses with statistical calculations to correlate Pressure Betterment spending with New Business spending, meter sets, or demand. The Pressure Betterment forecast was based on historical levels of spending, in order to capture typical levels of spending as well as fluctuations from year to year.

The following graphics comparing Pressure Betterment spending to New Business spending and New Business meter sets were created, but were not used in any forecast methodologies.

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SoCalGas Response to Question 12c (Continued):



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13. Regarding Distribution Main Replacement (GOM-CWP-20 through 22)
- a. Please provide 2010 distribution main replacement spending divided into labor and non-labor.
 - b. Please provide the number of feet of main replaced (divided into plastic and steel if available) for each year from 2005-2010.

SoCalGas Response:

- a. 2010 main replacement spending divided into labor and non-labor is shown below

**Main Replacement
2010 Actuals
Shown in Thousands of 2009 \$**

Labor	\$ 5,411
Non Labor	\$38,571
Total	\$43,981

- b. The footage of main replaced (divided into plastic and steel) for years 2005 – 2010 is shown below.

Main Replacements			
Year	# of Projects	Total Installed Footage Plastic (ft)	Total Installed Footage Steel (ft)
2005	480	361,549	5902
2006	420	259,522	7,890
2007	492	329,483	6,275
2008	487	345,181	6,301
2009	539	310,532	12,508
2010	505	323,984	3,265

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14. Regarding Abandonment of Mains and Services (GOM-CWP 23 and 24):
- a. Please provide 2010 expenses in 2009 dollars divided into labor and non-labor.
 - b. Please provide 2000-2004 expenses in 2009 dollars divided into labor and non-labor.
 - c. Please explain why costs were lower in 2008-2009 than in 2005-2007 for this cost category.
 - d. Identify any correlations between abandonment of mains and new meter sets or other aspects of economic activity.

SoCalGas Response:

- a. 2010 Abandonment of Mains and Services expenses in 2009 dollars divided into labor and non-labor is shown below.

**Abandonment of Mains and Services
2010 Actuals
Shown in Thousands of 2009 \$**

Labor	\$ 1,027
Non Labor	\$1,308
Total	\$2,515

- b. The tables below display capital expenditures in Abandonment of Mains and Services in both nominal (dollars of the year) and real (2009 dollars) terms. For consistency with the data provided in the GRC TY2012 Application, a factor of 17.865% was added to the recorded data representing the average of 2005 - 2010 V&S factor from the GRC.

(Shown in Thousands of Dollars)

Source	BW Queries With V&S Dollars of Year				
	2000 A	2001 A	2002 A	2003 A	2004 A
BC 254+259 Abandonment of Mains and Services					
labor	1,184	1,114	1,270	1,706	1,554
nonlabor	812	1,019	1,114	1,286	1,277
Total	1,529	1,598	1,679	2,447	2,253

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SoCalGas Response to Question 14b (Continued):

(Shown in Thousands of Dollars)

Source	BW Queries with V&S 2009\$				
	2000 A	2001 A	2002 A	2003 A	2004 A
BC 254+259 Abandonment of Mains and Services					
labor	1,943	1,804	2,016	2,620	2,072
nonlabor	1,333	1,651	1,768	1,975	1,703
Total	3,277	3,454	3,783	4,595	3,775

- c. Please refer to the direct testimony of Ms. Gina Orozco-Mejia (Exhibit SCG-02) pages GOM-70 and GOM-71 which explains the nature of main and service abandonments and when they occur. The lower expenditures in the 2008 – 2009 time period is driven by fewer projects needing to be abandoned.
- d. General abandonment activity is not tied to new meter sets or other aspects of economic activity. As is described in the testimony (Exhibit SCG-02) pages GOM-70, beginning at line 12

Abandonment of mains and services occur primarily when the pipeline is no longer needed for current system operations and it is not expected to be needed in the future. Abandonments of mains occur primarily to render the pipeline inactive due to its condition or location. Service lines are deactivated due to replacement with new service, relocation of the meter set to a different location, cancellation of gas service due to building demolition, or when temporary service is terminated. When a service line becomes inactive it is evaluated to determine if it will be left in place or if abandonment is required.

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15. Regarding Distribution Service Replacement (GOM-CWP 25 and 26):
- a. Please provide 2010 distribution service replacement spending in 2009 dollars divided into labor and non-labor.
 - b. Please provide the number of services replaced for each year from 2005-2010.

SoCalGas Response:

- a. 2010 distribution service replacement spending in 2009 dollars divided into labor and non-labor is shown below.

**Distribution Service Replacement
2010 Actuals
Shown in Thousands of 2009 \$**

Labor	\$4,310
Non Labor	\$7,148
Total	\$11,458

- b. The number of services replaced for years 2005 – 2010 are shown below.

Service Replacements		
Year	# of Projects	Total Footage (ft)
2005	2,138	162,525
2006	1,996	139,001
2007	2,124	154,265
2008	1,591	113,845
2009	1,750	123,786
2010	1,541	108,832

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16. Regarding Freeway Relocations (GOM-WP-26 through 29)
- a. Please provide 2010 spending in 2009 dollars divided into labor and non-labor.
 - b. Please provide the current status of each the timing of pipe relocation for each freeway project for which SoCal estimated costs of \$400,000 or more on GOM-WP-27 and 28 and any other projects associated with the 405 Freeway widening in Los Angeles.

SoCalGas Response:

- a. 2010 freeway relocations spending in 2009 dollars divided into labor and non-labor is shown below.

Freeway Relocations
2010 Actuals
Shown in Thousands of 2009 \$

Labor	\$ 87
Non Labor	\$1,653
Total	\$1,740

- b. The projects provided in the capital workpaper (Exhibit SCG-02-CWP, pages GOM-CWP-27 – 28) were the Freeway Relocation projects known at the time the Application was filed. These projects were provided as confirmation that the 2009 level of spending was a reasonable level for anticipated Freeway Relocation capital spending. These projects, project details, and timing may change. As stated in Exhibit SCG-02, page GOM-74:

The exact timing and number of freeway pipeline projects is driven by outside agencies, therefore, expenditures in this category are dependent on the number, extent, and timing of these requests and largely outside of SoCalGas' control. However, when projects do occur, SoCalGas must complete its portion of the work while minimizing schedule delays for the agency.

Please see the attached file with the current status for the Freeway Relocation projects listed in the capital workpaper that were estimated to be \$400,000 or more or were associated with the 405 Freeway widening.



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17. Regarding Cathodic Protection spending (GOM-WP-30 and 31)
- a. Please provide 2010 spending in 2009 dollars divided into labor and non-labor.
 - b. Please provide the calculations supporting the upward trend in spending for 2010-2012.
 - c. Please identify the number of deep wells drilled in each year from 2005-2010 and their average cost per well.
 - d. Please explain why SoCal expects the cost of deep wells to continue to increase after 2009.
 - e. Please provide the calculations supporting the upward trend in spending for 2010-2012 including any tests of statistical significance conducted.

SoCalGas Response:

- a. 2010 Cathodic Protection (CP) spending in 2009 dollars divided into labor and non-labor is shown below.

Cathodic Protection
2010 Actuals
Shown in Thousands of 2009 \$

Labor	\$ 190
Non Labor	\$3,172
Total	\$3,361

- b. For the CP category, the 5 year trend formula (using 2005 -2009 actual costs as basis) was used to compute the 2010 – 2012 forecasted amounts. The actual costs in these years were (inflation adjusted and in thousands of dollars)
 - 2005 - \$3,334,
 - 2006 - \$3,705;
 - 2007 - \$4,083,
 - 2008 - \$3,873, and
 - 2009 - \$3,947
- See Exhibit SCG-02-CWP 31.

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SoCalGas Response to Question 17 (Continued):

- c. Deep well anodes drilled each year from 2005-2010 and their average cost per well is shown in the table below.

Deep Wells Installed and Cost Per Well

Actual Costs Shown in 2009 Dollars

Year	# Wells	Cost Per Well
2005	74	31,693
2006	61	43,418
2007	86	32,840
2008	81	31,985
2009	72	37,105
2010	75	37,297

The real increase in the cost per well from 2005 to 2009 is \$5,412 or 17%.

- d. As stated in Exhibit SCG-02, page GOM-73:

SoCalGas has experienced a 17% real increase in contractor costs for deep well drilling over the period 2005 to 2009... This trend is expected to continue as the demand for services on deep well drillers increases based on a limited number of service providers.

- e. See response to Question 17 b.

The trending calculations that were performed used the FORECAST function available through Microsoft Excel. This was done in an automated manner by exporting data from a central location to Excel, capturing the forecast result, and redepositing those values to a central location from which forecast planners could draw them. While variance calculations can be produced through that function, they were not captured nor made available to planners.

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18. Regarding Meter Guard spending (GOM-WP- 32):
- a. Please provide 2010 spending in 2009 dollars divided into labor and non-labor.
 - b. Please provide the calculations supporting the upward trend in spending for 2010-2012 including any tests of statistical significance conducted.

SoCalGas Response:

- a. 2010 Meter Guard spending in 2009 dollars divided into labor and non-labor is shown below.

Meter Guard
2010 Actuals
Shown in Thousands of 2009 \$

Labor	\$ 884
Non Labor	\$343
Total	\$1,227

- b. For the Meter Guard category, the 5 year trend formula (using 2005 -2009 actual costs as basis) was used to compute the 2010 – 2012 forecasted amounts. The actual costs in these years were (inflation adjusted and in thousands of dollars) 2005 - \$449, 2006 - \$485, 2007 - \$681, 2008 - \$726, and 2009 - \$892. See Exhibit SCG-02-CWP 32.

The trending calculations that were performed used the FORECAST function available through Microsoft Excel. This was done in an automated manner by exporting data from a central location to Excel, capturing the forecast result, and redepositing those values to a central location from which forecast planners could draw them. While variance calculations can be produced through that function, they were not captured nor made available to planners.

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19. Regarding Distribution Regulator Stations (GOM-WP-33 and 34):
- a. Please provide 2010 spending in 2009 dollars divided into labor and non-labor.
 - b. Please explain why there appear to be economies of scale in regulator station spending; when SoCal replaces more stations, the unit cost declines (comparing 2007 and 2008 data with 2005, 2006, and 2009 data).
 - c. For each replacement in 2005-2009, provide (a) an identifier; (b) some measure or measures of size or complexity of the station used by SoCal in the normal course of business; (c) the cost of the replacement (in nominal and 2009 dollars).
 - d. For each replacement currently identified for 2010-2012, provide (a) an identifier and (b) some measure or measures of size or complexity of the station used by SoCal in the normal course of business.

SoCalGas Response:

- a. 2010 distribution regulator station spending in 2009 dollars divided into labor and non-labor is shown below.

Distribution Regulator Station
2010 Actuals
Shown in Thousands of 2009 \$

Labor	\$ 307
Non Labor	\$3,524
Total	\$3,831

- b. Annual Regulator Station replacements are prioritized by considering Pressure District Load requirements, Engineering Design of current station, Age of existing station and Customer/Load Growth. The cost per regulator station can vary depending of the capacity, pressure requirements and location. The larger regulator stations are more complex to design and construct and therefore have a high cost, while the smaller regulator stations are simpler and cost less. During years when smaller regulator stations are built SoCalGas is able to complete more units driving the unit cost down. When the stations identified in a given year are of a similar size/design then Economy of Scales can be achieved through construction/installation of the stations.

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SoCalGas Response to Question 19 (Continued):

- c. Each pressure district will have a Regulator Station(s) as part of its pipeline system which will feed gas at a consistent flow and pressure. These stations are designed and sized in order to meet the flow characteristics of the Pressure District (# of customers, total gas load of the Pressure District, peak flow rates expected to feed Pressure District). These stations typically range from 2-inch to 6-inch regulators and are comprised of many control valves and piping. The designs of Regulator Stations usually consist of redundant features such as parallel runs of piping / regulation in order to meet operational variations in flow/pressure. The load requirements, design of existing station and age of station are all factors considered when prioritizing Regulator Station Replacements. The average cost per Regulator Station project over the period of 2005 - 2009 is \$302,620 (stated in 2009 dollars).

- d. See answer to Question 19c above. Additionally, the size and complexity of Regulator Stations vary from the standard High Pressure to Medium Pressure 2-inch, 4-inch and 6-inch to the very complex High Pressure to High Pressure and Pressure Limiting Stations. Special Design stations are required in Pressure Districts that contain large point loads or large seasonal loads where control valves must be able to operate under varying flow/load conditions. Field conditions are changing where past installations allowed for above ground stations and due to increased customer densities and/or code or city/county aesthetic requirements many stations are being designed for below ground installation in vaults.

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20. Regarding Supply Line Replacements (GOM-CWP-35 and 36):
- a. Please identify cost drivers for supply line replacement and identify any correlations of these replacements with new business or other spending or with gas demand.
 - b. Please provide the current status of each of the eight projects on GOM-CWP-35.
 - c. Please explain why gross costs were higher in 2005-2007 than in 2008-2009. Identify specific large projects, if any, that caused these results.
 - d. Please provide 2010 actual spending (labor and non-labor) and the amount of direct cash credits.

SoCalGas Response:

- a. The Supply Line Replacement drivers are discussed in Exhibit SCG-02, page GOM-67:

Supply line replacement decisions are based on several factors, including pipe condition, leakage history, operating history, construction methods, system demands, proximity to known potential geologic hazards, and consequence of potential failure. In some cases, replacement criteria focus primarily on pipe age and population density due to potential risk to public safety. In other cases, supply line replacements address lines of lower risk to public safety but that could potentially have a major impact on service continuity to customers in geographically isolated areas.

Supply Line Replacements are not directly related to New Business or other spending or gas demand.

- b. The projects provided in the capital workpaper (Exhibit SCG-02-CWP, page GOM-CWP-35) were the Supply Line Replacement projects known at the time the Application was filed. These projects were provided as confirmation that the 5-year average level of spending was a reasonable level for anticipated Supply Line Replacement capital spending. These projects, project details, and timing may change.

Please see the attached file with the current status for the Supply Line Replacement projects listed in the capital workpaper.



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u20b-Supply Line.pdf

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SoCalGas Response to Question 20 (Continued):

- c. A review of the historical Supply Line Replacement projects showed that there were eight projects charged between 2005 and 2007 that exceed \$500,000 in one year, while there were no projects charges that large in 2008 or 2009.

Project Title	2005	2006	2007
INSTALL 3700' OF 8" HP STEEL MAIN	618,243	4,480	
SL 35-17 REPLACEMENT		813,733	1,641
(SIP-44) SUPPLY LINE 36-1001 SEC 3, P 1	949,307	(128,538)	(127)
S.L. 32-116-2 - WOODFORD-TEHACHAPI R	33,225	2,142,634	21,385
OLD 215 FRONTAGE RD. REPLACE SL 41-13	5,224	906,147	8,565
SL #38-514 REPLACEMENT PHASE 3	1,180,195	21,879	2,685
MISSION BLVD S.L. 41-40		1,170	1,230,137
RIO BRAVO / ELKS HILL PROJECT			1,724,090

All amounts are shown in nominal dollars without vacation or sick time allocation for company labor.

It is for this reason that SoCalGas based the Supply Line Replacement forecast on a five-year historical average. This average captures fluctuations in spending from year to year. A discussion of this can be found in Exhibit SCG-02, page GOM-67:

While potential work has been identified, the timing of these replacements is still dependent on a timely review of operating conditions, detailed planning requirements, acquiring the required permits, and coordination of scheduling. Therefore, specific project timelines are difficult to predict. For this reason, SoCalGas is estimating expenditures for the years 2010 through 2012 based on a historical average of recorded expenditures for the years 2005 through 2009. This five year average is most representative of future work requirements and expected expenditures, as it captures typical fluctuations in supply line project costs from year to year.

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SoCalGas Response to Question 20 (Continued):

- d. 2010 supply line replacement actual spending (labor and non-labor) is shown below.

Supply Line Replacement
2010 Actuals
Shown in Thousands of 2009 \$

Labor	\$ 38
Non Labor	\$1,199
Total	\$1,237

There were no direct cash credits for 2010.

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21. Regarding Other Distribution Projects (GOM-CWP-37 and 38):
- a. Please explain why gross costs were higher in 2006-2007 and net costs were higher in 2006. Identify specific large projects that caused these results.
 - b. Please provide 2010 actual spending (labor and non-labor) and the amount of direct cash credits.

SoCalGas Response:

- a. The Other Distribution Projects category is mainly projects driven by property owners requesting SoCalGas to move its facilities from their property. This work can be tied to general economic conditions, and 2006-2007 were robust years leading to higher gross costs.

With the many issues concerning collectability, each project and each fiscal year may have a distinct make up in costs. Jobs may or may not be collectible at all or may be partially collectible. Depending on the circumstances and each particular customer, collection of the cash may occur before or after project completion. Also, project costs may be incurred in one fiscal year while the cash collected may be in another fiscal year. Therefore, an average of net costs over multiple years (some robust, some not) was a reasonable approach given the nature of this work activity.

The following projects (over \$100,000) in 2006 were largely uncollectible or cash was collected in a different fiscal year. As such, gross costs were up, and because cash was not collected, net costs were up as well.

**Jobs in 2006 that were Uncollectible or
Cash Collected in Different Year**

Shown in Nominal Dollars

Work Order	Project Description	Gross Cost Amt
78153	LACMTA (SEG 6) 3RD ST/EASTERN AVE TO ARI	\$ 204,304
78154	LACMTA (SEG 7) 3RD ST/ARIZONA AVE TO ATL	\$ 644,086
78182	MTA (SEG 4) 1ST STREET & LORANA	\$ 312,175
78199	MTA-SEG 4A-1ST STREET/LORENA-NORTH-2JOB	\$ 208,935
79811	MTA SEG 2: 1ST STREET/ALAMEDA TO 1ST STR	\$ 214,205
78183	MTA (SEG 5) 3RD ST/DITMAN ST TO EASTERN	\$ 146,610
79805	MTA-SEG 1A-TEMPLE AND ALAMEDA 6"HP DROP	\$ 141,727
79812	MTA SEG#1; ALAMEDA-1ST STREET TO TEM	\$ 134,047

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SoCalGas Response to Question 21 (Continued):

- b. 2010 other distribution projects actual spending (labor and non-labor) is shown below.

Other Distribution Projects
2010 Actuals
Shown in Thousands of 2009 \$

Labor	\$ 323
Non Labor	\$2,330
Total	\$2,653

The 2010 amount of direct cash credits is \$1,217,217 (in nominal dollars).

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22. Regarding Franchise Relocations (GOM-CWP 39-40):
- a. Please identify the basis for SoCal’s statements that municipalities in its service area will see “improving economic conditions?” Provide any quantitative support for the statement.
 - b. Please identify the basis for SoCal’s statements that municipalities in its service area will see “availability of funding to municipalities?” Provide any quantitative support for the statement.
 - c. SoCal states that “Therefore, SCG is requesting funding equal to the five year trend (2005 through 2009) for 2010 through 2012, as it is most representative of future work requirements and expected expenditures.” Please provide the calculations supporting the upward trend in spending for 2010-2012 including any tests of statistical significance conducted.
 - d. Please provide actual costs in 2010 divided into labor and non-labor in 2009 dollars.

SoCalGas Response:

- a. As stated in Exhibit SCG-02, page GOM-5:

Gas Distribution has chosen employment growth, as reported by IHS Global Insight, as a directional indicator for general economic conditions and potential economic growth. This IHS Global Insight employment forecast is shown in the SoCalGas cost escalation workpapers of witness Mr. Scott Wilder, Exhibit SCG-31-WP. In general, IHS Global Insight forecasts that the Southern California area's non-farm employment growth rate hit a low in 2009, with 2010 marking a transitional year. It is projecting a rebound in employment growth through 2012, with forecasted employment in 2011 and 2012 near what was seen in 2005 through 2006.

A summary of the updated February 2011 forecast from IHS Global Insight is provided below.

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SoCalGas Response to Question 22a (Continued):

SoCalGas Area Employment: February 2011 forecast

"SCG6" is the aggregated "Big 6" counties that account for about 90% of economic activity in SoCalGas' service area: Kern, Los Angeles, Orange, Riverside, San Bernardino, Ventura.

<u>Year</u>	<u>Nonfarm Employment (millions)</u>	<u>Nonfarm Employment (% change)</u>
2000	6.918	
2001	7.000	1.2%
2002	6.982	-0.2%
2003	7.003	0.3%
2004	7.111	1.5%
2005	7.249	1.9%
2006	7.410	2.2%
2007	7.444	0.5%
2008	7.305	-1.9%
2009	6.838	-6.4%
2010	6.720	-1.7%
2011	6.775	0.8%
2012	6.899	1.8%
2013	7.046	2.1%
2014	7.171	1.8%
2015	7.282	1.5%
2016	7.371	1.2%
2017	7.452	1.1%
2018	7.527	1.0%
2019	7.595	0.9%
2020	7.672	1.0%

Source: Global Insight, Feb. 2011 Regional forecast

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SoCalGas Response to Question 22 (Continued):

- b. SoCalGas expects an increase in the number of street and highway improvement projects in upcoming years as municipalities receive federal stimulus funding. This assumption is supported by information showing Recovery Act monies have been granted, received and expended by California Counties for Transportation Works. According to the Transportation Distribution Funds Graph, located at <http://www.recovery.ca.gov/html/funding/transportation/transportation.shtml>, California has spent approximately 20% of the potentially available Federal funding as of April 28, 2011. In 2011 and 2012 SoCalGas expects increases in transportation projects as more of the awarded stimulus dollars become available to the State.
- c. A simple five-year (2005 – 2009) linear trend was used as the basis for the Franchise Relocations forecast. The calculation of the forecasted upward trend in spending for 2010 through 2012 can be found on page GOM-CWP-40 of Exhibit SCG-02-CWP.

As stated in Exhibit SCG-02, page GOM-75:

SoCalGas anticipates future expenditures in this workgroup to approximate a five-year trend of the 2005 to 2009 spending levels. The expectation for continuing growth in requests from municipalities for the relocation and/or alteration of SoCalGas facilities is based on the following influential factors:

- Improving economic conditions.
- Availability of funding to municipalities
- Population growth and density.
- Age of infrastructure.

More information on these influential factors can be found on pages GOM-75 – GOM-76 of Exhibit SCG-02.

The trending calculations that were performed used the FORECAST function available through Microsoft Excel. This was done in an automated manner by exporting data from a central location to Excel, capturing the forecast result, and redepositing those values to a central location from which forecast planners could draw them. While variance calculations can be produced through that function, they were not captured nor made available to planners.

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SoCalGas Response to Question 22 (Continued):

- d. 2010 franchise relocation costs in 2009 dollars divided into labor and non-labor is shown below

Franchise Relocation
2010 Actuals
Shown in Thousands of 2009 \$

Labor	\$ 807
Non Labor	\$10,209
Total	\$11,016

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23. Please provide the current status of SoCal's request to purchase Optical Imaging Units (GOM-CWP-41 and 42)? When, if at all are purchases expected, and are the same number of units still expected to be purchased?

SoCalGas Response:

In the initial ruling, optical imaging was the only method for leak detection addressed within CFR part 60, subpart 60.18(i)(1) and (2).

Subsequently, EPA finalized the Greenhouse Gas Mandatory Reporting Rule and in EPA's Subpart W Preamble Final Rule under 40 CFR 98 §98.234 Monitoring and QA/QC requirements (a) (3) allows the use of an Infrared laser beam illuminated instrument to conduct leak detection(s) of equipment leaks.

Currently, SoCalGas plans on using an Infrared Laser Beam Illuminated Instrument in-lieu of the other methods specified in 40 CFR 98 §98.234. However, the rule does require that Optical Gas Imaging instrument be used for all source types that are inaccessible and cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface. In these instances where we are required by regulation to use Optical Gas Imaging instruments, SoCalGas will need to purchase, train and utilize this equipment along with the other units.

The timing of the purchases of this equipment is dependant upon further interpretation of the rules. SoCalGas is currently supporting the American Gas Association who is working with EPA to gain greater clarity on the rulings and its requirements for Subpart W as it applies to SoCalGas' business operations. Until more specific guidance is received SoCalGas has not scheduled any purchases of this equipment for implementation of this ruling.

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24. Are there any savings in operating costs for leak detection if optical imaging units are purchased?

SoCalGas Response:

The use of this equipment will not result in a reduction of ongoing operating costs for leak detection.

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25. Regarding Distribution Field Support (GOM-CWP-49 and 50).
- Please fill out the chart on page GOM-CWP-50 for the year 2010.
 - Please provide non-labor costs for 2005-2010.

SoCalGas Response:

- The chart from page GOM-CWP-50 has been update for 2010 as shown below.

Ratio Computation - Adjusted Historical and Forecast							
Dollars in Thousands							
	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010 A</u>	Forecast <u>2011 E</u> <u>2012 TY</u>
Field Support Labor Costs (Historical)	42,963	43,926	45,973	38,014	35,943	34,712	
Construction Costs (Hist and Forecast) *	121,308	154,751	143,855	105,176	100,177	104,203	127,552 134,193
- Franchise	6,534	10,140	8,922	8,097	8,887	11,016	9,581 9,848
- Freeway	830	1,974	1,012	788	2,219	1,740	2,219 2,219
- Service Repl.	11,955	12,001	12,734	10,514	12,000	11,458	11,841 11,841
- Main Repl.	24,694	29,122	38,720	33,395	35,696	43,982	32,325 32,325
- Pressure Betterment	12,199	17,640	11,059	11,393	10,992	9,340	13,434 13,434
- New Business	46,773	60,018	48,734	23,802	14,096	11,631	34,734 40,557
- Supply Lines	4,022	5,326	3,833	829	1,953	1,237	3,193 3,193
- Reg Station	4,159	5,657	4,526	4,327	3,864	4,043	7,263 7,565
- Cathodic Protection	3,334	3,705	4,083	3,843	3,947	3,361	4,328 4,464
- Main & Service Abandonments	4,056	4,233	5,295	3,667	2,858	2,515	4,022 4,022
- Other Dist Projects	2,114	4,389	4,172	3,796	2,769	2,653	3,448 3,448
- Mobile Home Parks	189	60	84	-	4	-	67 67
- Meter Guards	449	485	681	726	892	1,227	1,097 1,210
Field Support Ratio	35.4%	28.4%	32.0%	36.1%	35.9%	33.3%	31.0% 30.0%
Field Support Labor Costs (Forecast)							39,541 40,258

* Construction costs include only the work categories requiring field suport.

- Non labor costs for 2005-2009 are shown below as originally shown on page GOM-CWP-51. This chart has been updated to include 2010 non labor costs.

<i>All years stated in DIRECT \$000 2009 Dollars and Includes V&S</i>							
Adjusted Historical							
	<u>2005A</u>	<u>2006A</u>	<u>2007A</u>	<u>2008A</u>	<u>2009A</u>	<u>2010A</u>	<u>2011E</u> <u>2012TY</u>
History							
labor	42,963	43,926	45,973	38,014	35,943	34,712	39,541 40,258
nonlabor	448	839	348	369	(202)	(63)	360 360
Total	43,411	44,765	46,321	38,383	35,741	34,649	39,901 40,618
FTEs	573.7	589.8	581.9	529.4	485.2	452.1	528.3 537.8