Application of SOUTHERN CALIFORNIA GAS	)
COMPANY for authority to update its gas revenue	)
requirement and base rates	)
effective January 1, 2012 (U 904-G)	)

Application No. 10-12-___
Exhibit No.: (SCG-02-WP)

WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF GINA OROZCO-MEJIA
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

DECEMBER 2010

Application of SOUTHERN CALIFORNIA GAS	)
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DECEMBER 2010

2012 General Rate Case - APP

INDEX OF WORKPAPERS

Exhibit SCG-02 - GAS DISTRIBUTION

Overall Summary For Exhibit No. SCG-02

Area: **GAS DISTRIBUTION**

Witness: **Orozco, Guillermina**

	In 2009 $ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
Description	**2009**	**2010**	**2011**	**2012**
Non-Shared Services	92,312	98,558	125,111	131,182
Shared Services	1,121	1,155	1,155	1,155
Total	93,433	99,713	126,266	132,337

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina

Summary of Non-Shared Services Workpapers:

	In 2009 $ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
Description	**2009**	**2010**	**2011**	**2012**
A. Field Operations & Maintenance	66,666	71,981	96,321	100,934
B. Asset Management	13,967	13,844	14,152	14,190
C. Operations Management & Training	7,772	8,826	10,731	12,151
D. Regional Public Affairs	3,907	3,907	3,907	3,907
Total	92,312	98,558	125,111	131,182

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Workpaper: VARIOUS

Summary for Category: A. Field Operations & Maintenance

	In 2009$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2009	2010	2011	2012
Labor	49,878	54,472	53,822	56,782
Non-Labor	16,788	17,509	42,499	44,152
NSE	0	0	0	0
Total	66,666	71,981	96,321	100,934
FTE	673.9	729.7	727.6	759.2

Workpapers belonging to this Category:

2GD000.000 Pipeline Operations & Maintenance -- Field Support

Labor	12,513	15,020	13,627	16,066
Non-Labor	1,898	2,202	2,381	2,543
NSE	0	0	0	0
Total	14,411	17,222	16,008	18,609
FTE	157.4	183.0	172.7	198.1

2GD000.001 Pipeline O&M-Leak Survey

Labor	3,729	3,896	4,018	4,139
Non-Labor	2	6	6	6
NSE	0	0	0	0
Total	3,731	3,902	4,024	4,145
FTE	60.2	63.0	64.9	66.9

2GD000.002 Pipeline O&M-Locate & Mark

Labor	9,054	9,328	9,377	9,497
Non-Labor	633	975	1,014	1,060
NSE	0	0	0	0
Total	9,687	10,303	10,391	10,557
FTE	133.3	138.0	138.4	139.6

2GD000.003 Pipeline O&M-Main Maintenance

Labor	4,887	5,163	5,211	5,332
Non-Labor	1,800	1,944	2,193	2,599
NSE	0	0	0	0
Total	6,687	7,107	7,404	7,931
FTE	64.3	69.7	70.2	71.7

2GD000.004 Pipeline O&M-Service Maintenance

Labor	9,978	10,256	10,477	10,630
Non-Labor	183	-15	106	246
NSE	0	0	0	0
Total	10,161	10,241	10,583	10,876
FTE	128.7	133.0	135.3	136.7

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Workpaper: VARIOUS

	In 2009$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2009	2010	2011	2012
2GD000.005 Pipeline O&M-Tools, Fittings & Materials				
Labor	0	0	0	0
Non-Labor	8,620	8,653	9,399	10,145
NSE	0	0	0	0
Total	8,620	8,653	9,399	10,145
FTE	-0.4	-0.4	-0.4	-0.4
2GD000.006 Pipeline O&M-Cathodic Protection Field				
Labor	896	1,011	1,011	1,011
Non-Labor	1,311	1,635	1,782	1,935
NSE	0	0	0	0
Total	2,207	2,646	2,793	2,946
FTE	13.3	14.7	14.7	14.7
2GD002.000 Measurement & Regulation				
Labor	8,821	9,798	10,101	10,107
Non-Labor	2,341	2,109	25,618	25,618
NSE	0	0	0	0
Total	11,162	11,907	35,719	35,725
FTE	117.1	128.7	131.8	131.9

Beginning of Workpaper
2GD000.002 - Pipeline O&M-Locate & Mark

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub 1. Locate & Mark
Workpaper: 2GD000.002 - Pipeline O&M-Locate & Mark

Activity Description:

Recorded to this work group are labor and non-labor expenses incurred by field personnel to locate and mark distribution pipeline facilities as required by 49 CFR 192.614 and the California One-Call law; job observations which entail overseeing work completed by third parties around Company facilities; and potholing to determine depth of company facilities.

Forecast Methodology:

Labor - 5-YR Average

A five year average is the most appropriate methodology to use in forecasting the TY2012 labor requirements for this work group. The level of work required in this work group is impacted by construction activity which is affected by economic conditions. It is expected that economic conditions will improve, and as such, the labor requirements to complete the activities in this work group are expected to increase as well. Using a five year average captures the high and low expenditures seen under a variety of economic conditions. To the five year average foundation, additional costs are forecasted for: (1) Los Osos City sewer project; (2) city requirement to remove USA markings; (3) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (4) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

Non-Labor - 5-YR Average

A five year average is the most appropriate methodology to use in forecasting the TY2012 non labor requirements for this work group. A five year average captures the high and low expense levels that occur year over year. To the five year average foundation, additional costs are forecasted for: (1) Los Osos City sewer project; (2) city requirement to remove USA markings; (3) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (4) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

NSE - 5-YR Average

NSE is not applicable to this work group.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	8,701	8,916	9,517	9,001	9,054	9,328	9,377	9,497
Non-Labor	807	1,029	803	875	633	975	1,014	1,060
NSE	0	0	0	0	0	0	0	0
Total	9,508	9,945	10,320	9,876	9,687	10,303	10,391	10,557
FTE	130.9	134.2	141.6	135.9	133.3	138.0	138.4	139.6

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 1. Locate & Mark
Workpaper: 2GD000.002 - Pipeline O&M-Locate & Mark

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	5-YR Average	9,037	9,037	9,037	291	340	460	9,328	9,377	9,497
Non-Labor	5-YR Average	829	829	829	146	185	231	975	1,014	1,060
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
Total		9,866	9,866	9,866	437	525	691	10,303	10,391	10,557
FTE	5-YR Average	135.2	135.2	135.2	2.8	3.2	4.4	138.0	138.4	139.6

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010	291	0	0	291	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) city requirement to remove USA markings; (3) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (4) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

2010	0	0	0	0	2.8	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) city requirement to remove USA markings; (3) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (4) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

2010	0	146	0	146	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) city requirement to remove USA markings; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

2010 Total	**291**	**146**	**0**	**437**	**2.8**	
2011	340	0	0	340	0.0	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 1. Locate & Mark
Workpaper: 2GD000.002 - Pipeline O&M-Locate & Mark

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) city requirement to remove USA markings; (3) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (4) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.						
2011	0	185	0	185	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) city requirement to remove USA markings; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.						
2011	0	0	0	0	3.2	1-Sided Adj
A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) city requirement to remove USA markings; (3) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (4) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.						
2011 Total	**340**	**185**	**0**	**525**	**3.2**	
2012	460	0	0	460	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) city requirement to remove USA markings; (3) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (4) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.						
2012	0	231	0	231	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) city requirement to remove USA markings; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.						
2012	0	0	0	0	4.4	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 1. Locate & Mark
Workpaper: 2GD000.002 - Pipeline O&M-Locate & Mark

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) city requirement to remove USA markings; (3) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (4) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

2012 Total	**460**	**231**	**0**	**691**	**4.4**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 1. Locate & Mark
Workpaper: 2GD000.002 - Pipeline O&M-Locate & Mark

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	6,641	6,952	7,646	7,360	7,554
Non-Labor	187	367	246	270	267
NSE	0	0	0	0	0
Total	6,827	7,319	7,892	7,630	7,821
FTE	110.9	113.4	119.8	113.5	112.1
Adjustments (Nominal $) **					
Labor	0	0	0	0	114
Non-Labor	532	583	520	608	366
NSE	0	0	0	0	0
Total	532	583	520	608	480
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	6,641	6,952	7,646	7,360	7,668
Non-Labor	719	950	766	878	633
NSE	0	0	0	0	0
Total	7,360	7,902	8,412	8,238	8,301
FTE	110.9	113.4	119.8	113.5	112.1
Vacation & Sick (Nominal $)					
Labor	1,132	1,242	1,334	1,418	1,386
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	1,132	1,242	1,334	1,418	1,386
FTE	20.0	20.8	21.8	22.4	21.2
Escalation to 2009$					
Labor	928	722	537	222	0
Non-Labor	88	79	37	-2	0
NSE	0	0	0	0	0
Total	1,017	801	574	220	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	8,701	8,916	9,517	9,001	9,054
Non-Labor	807	1,029	803	875	633
NSE	0	0	0	0	0
Total	9,508	9,946	10,320	9,876	9,687
FTE	130.9	134.2	141.6	135.9	133.3

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 1. Locate & Mark
Workpaper: 2GD000.002 - Pipeline O&M-Locate & Mark

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	0	0	0	0	114
Non-Labor	532	583	520	608	366
NSE	0	0	0	0	0
Total	532	583	520	608	480
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005	0	532	0	0.0	1-Sided Adj	N/A	TP1MTC2009100 8134645887
One sided adjustment to transfer USA fees from cost center 2200-2092. The transfer will combine both the USA fees and the Locate & Mark expenditures into the same workgroup. Corresponding one-sided adjustment (decrease) in cost center 2200-2092.							
2005 Total	**0**	**532**	**0**	**0.0**			
2006	0	583	0	0.0	1-Sided Adj	N/A	TP1MTC2009100 8134732607
One sided adjustment to transfer USA fees from cost center 2200-2092. The transfer will combine both the USA fees and the Locate & Mark expenditures into the same workgroup. Corresponding one-sided adjustment (decrease) in cost center 2200-2092.							
2006 Total	**0**	**583**	**0**	**0.0**			
2007	0	520	0	0.0	1-Sided Adj	N/A	TP1MTC2009100 8134904123
One sided adjustment to transfer USA fees from cost center 2200-2092. The transfer will combine both the USA fees and the Locate & Mark expenditures into the same workgroup. Corresponding one-sided adjustment (decrease) in cost center 2200-2092.							
2007 Total	**0**	**520**	**0**	**0.0**			

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 1. Locate & Mark
Workpaper: 2GD000.002 - Pipeline O&M-Locate & Mark

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2008	0	608	0	0.0	1-Sided Adj	N/A	TP1MTC2009100 8134946623

One sided adjustment to transfer USA fees from cost center 2200-2092. The transfer will combine both the USA fees and the Locate & Mark expenditures into the same workgroup. Corresponding one-sided adjustment (decrease) in cost center 2200-2092.

2008 Total	**0**	**608**	**0**	**0.0**			
2009	0	366	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 3133810303

One sided adjustment to transfer USA fees from cost center 2200-2092. The transfer will combine both the USA fees and the Locate & Mark expenditures into the same workgroup. Corresponding one-sided adjustment in cost center 2200-2092.

2009	114	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3085126373

Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.

2009 Total	**114**	**366**	**0**	**0.0**			

Supplemental Workpapers for Workpaper 2GD000.002

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Removal of USA One-call Paint Markings

Removal of USA One-call Paint Markings
A growing number of municipalities are requiring the removal of paint markings used to identify substructures during construction projects. For its own construction work, SCG will request other utilities to mark their underground facilities. The onus then is placed on the entity requesting the Underground Service Alert (USA) ticket to remove markings placed by all utilities responding to the ticket. In association with SCG's construction activities, SCG field personnel will remove marks utilizing a variety of methods. The calculation of these incremental costs are shown below.

Workgroups affected: **Locate and Mark**

Methodology: **Costs for the removal of USA One-call paint markings is calculated as follows:**

Labor
Total Orders x Estimated percent of total orders requiring paint mark removal x Estimated hours to do the work x Overtime Crew Rate (2 person based on Labor Agreement schedule)

Non-Labor
Total Orders x Estimated percent of total orders requiring paint mark removal x Estimated material costs per order

Labor Assumptions: [A]: 2005-2009 average number of orders generated by main leak repairs, service leak repairs/alterations, cathodic protection work, and depth checks. Management from SCG's operating bases responded to a survey related to the impact of this requirement. Their responses indicated that, in the past ,SCG's territory saw approximately 5% of their orders affected by the Paint Removal requirement, but now the system is experiencing approximately 20% of the orders requiring USA mark removal. This 15% increase was applied to the total affected orders.

[B]: Estimated percent of total orders that will require USA paint mark removal.

[C]: Time required to remove paint marks. This is estimated as an average time based on the various methods utilized to remove paint markings and the type of equipment necessary to do the work.

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[D]	[AxBxCxD]=[E]				[F]	[F]	[F]
Line #	Labor	Total Orders per Year	Percent requiring Paint Removal	Estimated Duration (Hrs)	Overtime Crew Rate (2 person)	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1		13,866	15%	1	$ 100.71	$ 209,467	$ 209,467	$ 209,467	$ 209,467	2.0	2.0	2.0

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Removal of USA One-call Paint Markings

Non Labor Assumptions:

[A] [B]: 2005-2009 average number of orders generated by main leak repairs, service leak repairs/alterations, cathodic protection work, and depth checks. Based on information provided by SCG's district management, the impact of this restriction is approximately a 15% increase in orders requiring removal of markings.

[C]: Non-labor costs are made up of:

> 3rd party contractors (some districts do not use SCG labor for this function)
> Black or Gray spray paint to cover up markings
> Tools necessary to perform the clean up work such as wire brushes, power washers, vacuum truck parts, water haul off, etc.

Line #		[A]	[B]	[C]	[AxBxC]			
	Non-Labor	Total Orders per Year	Percent requiring Paint Removal	Material Costs per Order	Total per Year	**2010**	**2011**	**2012**
2		13,866	15.00%	$ 10.00	$ 20,799	**$ 20,799**	**$ 20,799**	**$ 20,799**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Los Osos City Sewer System

Los Osos City Sewer System
The City of Los Osos in San Luis Obispo County is installing a sewer piping system to replace the existing septic tank systems. This project will encompass the entire city and begins in 2011 continuing through 2013. Additional work by SCG will be required to identify and avoid conflicts with the sewer pipe installation. The calculation of these incremental costs are shown below.

Workgroups affected:

- **Locate and Mark**
  - Depth Checks
  - Locating and Marking
  - Job Observations
- **Main Maintenance**
- **Service Maintenance**

Methodology:

Costs for performing Depth Checks, Main Alterations and Service Alterations is calculated as follows:

Labor
Total estimated orders x 2005-2009 average hours per order x overtime labor rate of impacted employees.

Non-Labor
Total estimated orders x 2005-2009 average annual cost per unit

Labor Assumptions:

[A]: Estimated number of units were derived by field assessment of the impact that the proposed sewer line will have on SCG's existing infrastructure. The Sewer line installation will force SCG to locate, mark and identify the depth of its pipelines. Mains and Services that are in conflict with the proposed sewer line location will need to be altered. Additionally continuous observation will be required where our high priority lines are within 10' of the proposed sewer.

[B]: Estimated hours per order based upon field assesment of the work.
[C]: Overtime rate for impacted employees
[E]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

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Supplemental Workpaper Calculations for incremental costs related to Los Osos City Sewer System

Line #	Labor	[A] Estimated Total Units	[B] Hours per Order	[C] Overtime Rate	[A x B x C]=[D] Total Project Cost	2010	2011 (20%)	2012 (70%)	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
1	**L&M (Depth Checks)**	98	12	$ 100.71	$ 120,156	$ -	**$ 24,031**	**$ 84,109**	0	0.2	0.8
2	**Locating and Marking**	5,763	0.21	$ 48.26	$ 59,304	$ -	**$ 11,861**	**$ 41,513**	0	0.1	0.4
3	**Job Observations**	319	4.00	$ 48.26	$ 61,573	$ -	**$ 12,315**	**$ 43,101**	0	0.1	0.4
4	**Main Alterations**	75	32	$ 100.71	$ 241,704	$ -	**$ 48,341**	**$169,193**	0	0.5	1.6
5	**Service Alterations**	513	6	$ 100.71	$ 307,509	$ -	**$ 61,502**	**$215,256**	0	0.6	2.1

Non-Labor Assumptions:

[A]: Estimated number of units were derived by field assessment of the impact that the proposed sewer line will have on SCG's existing infrastructure. The Sewer line installation will force SCG to locate, mark and identify the depth of its pipelines. Mains and Services that are in conflict with the proposed sewer line location will need to be altered. Additionally continuous observation will be required where our high priority lines are within 10' of the proposed sewer.

[B]: 2005-2009 average non-labor cost per unit

Line #	Non Labor	[A] Estimated Total Units	[B] Avg Annual Non Labor Cost Per Unit	[A x B] Total per Year	2010	2011 (20%)	2012 (70%)
6	**L&M (Depth Checks)**	98	$ 171.00	$ 16,758	$ -	**$ 3,352**	**$ 11,731**
7	**Locate and Mark**	0	$ -	$ -	$ -	$ -	$ -
8	**Job Observations**	0	$ -	$ -	$ -	$ -	$ -
9	**Main Alterations**	75	$ 6,742	$ 505,667	$ -	**$101,133**	**$353,967**
10	**Service Alterations**	513	$ 103	$ 52,734	$ -	**$ 10,547**	**$ 36,914**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding

Federal Stimulus Funding
The American Recovery and Reinvestment Act of 2009 provided funding to local and state agencies to construct mobility projects that bring value to the local, state and federal economy. This Act apportioned funds to California for highways, local streets and roads, freight and passenger rail, port infrastructure, and transit projects. As Stimulus Funding projects are constructed in local streets and highways, SCG anticipates that this work will result in a greater number of work orders. The calculation of these incremental costs are shown below.

Workgroups affected:

> **Locate and Mark (Depth Checks)**
> **Main Maintenance**
> **Service Maintenance**
> **Cathodic Protection**

Methodology:

The cost for additional labor and non labor in workgroups Locate & Mark, Main Maintenance and Service Maintenance was calculated as follows:

Labor
Total estimated work units x 2005-2009 average hours per unit x overtime labor rate of impacted employees.

Non-Labor
Total estimated work units x 2005-2009 average annual non labor cost per unit.

Note: Work units are either work orders or miles of Main

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding

Assumptions:

[A]: Estimated number of units were derived based on stimulus work data received from survey of field managers. The results reflect responses from District managers who have, or expect to have, Federal Stimulus projects in their area.

[B]: 2005-2009 average hours per unit.

[C]: Overtime rate of impacted employees

[E]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[AxBxC]=[D]				[E]	[E]	[E]
Line #	Labor	Estimated Annual Units	Hours per Unit	Overtime Rate	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	L&M (Depth Checks)	60	12	$100.71	$72,511	$72,511	$72,511	$72,511	0.7	0.7	0.7
2	Main Maintenance	17	31	$100.71	$53,524	$53,524	$53,524	$53,524	0.5	0.5	0.5
3	Service Maintenance	43	9	$100.71	$39,528	$39,528	$39,528	$39,528	0.4	0.4	0.4
4	Cathodic Protection	193	1.28	$ 48.26	$11,962	$11,962	$11,962	$11,962	0.2	0.2	0.2

Assumptions:

[A]: Estimated number of units were derived based on stimulus work data received from survey of field managers. The results reflect responses from District managers who have, or expect to have, Federal Stimulus projects in their area.

[B]: 2005-2009 average non labor cost per unit.

		[A]	[B]	[A x B]			
Line #	Non Labor	Estimated Annual Units	Avg Annual Non Labor Cost Per Unit	Total per Year	2010	2011	2012
5	L&M (Depth Checks)	60	$ 171.00	$10,260	$10,260	$10,260	$10,260
6	Main Maintenance	17	$ 710.63	$12,081	$12,081	$12,081	$12,081
7	Service Maintenance	43	$ 172.08	$ 7,399	$ 7,399	$ 7,399	$ 7,399
8	Cathodic Protection	193	$ 107.58	$20,762	$20,762	$20,762	$20,762

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Increased City/Municipality Requirements

The construction, operation and maintenance of SCG's vast pipeline system require interaction and compliance with numerous local, state, and federal legislative and regulatory agencies. These agencies continue to impose new and often more stringent administrative planning and field construction operating conditions that can result in increased cost pressures to maintain the gas distribution system. These recent changes in municipality requirements that have led to cost increases for SCG due to mandated night work, engineered traffic control plans, limits on construction hours, increased construction permit costs and increased paving requirements. The calculation of these incremental costs are shown below.

Workgroups affected:

> **Main Maintenance**
> **Service Maintenance**
> **Cathodic Protection**
> **Locate and Mark (Depth Checks)**
> **Measurement & Regulation (M&R): Limits on construction hours only**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated work duration x overtime crew rates

Non-Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated non labor expenses

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units over time.

[B]: Estimated percent of total work units that will be impacted is based on assessment by the operating districts currently experiencing the restrictions.

[C]: Estimated additional hours required to comply with the City/Municipality restrictions. The calculation for durations of work were based on responses by the operating districts currently experiencing the restrictions.

[E] FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Non Labor Assumptions: [A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units.
[B]: Based upon field assessment of the impacts on the total number of orders.
[C]: Non labor costs are made up of:
Estimated 3rd party contractor labor (provided by operating district personnel)
Historical average costs for 3rd party rentals (night lights, steel plates, etc.)

Night work

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (3 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
1	Main Mtce	2,095	1.50%	1	$ 145.59	$ 4,575	$ 4,575	$ 4,575	$ 4,575	0.05	0.05	0.05
2	Service Mtce	4,230	1.50%	1	$ 145.59	$ 9,238	$ 9,238	$ 9,238	$ 9,238	0.09	0.09	0.09
3	CP Field	3,123	1.50%	1	$ 145.59	$ 6,820	$ 6,820	$ 6,820	$ 6,820	0.06	0.06	0.06
4	L&M (Depth Checks)	994	1.50%	1	$ 146.59	$ 2,186	$ 2,186	$ 2,186	$ 2,186	0.02	0.02	0.02

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
5	Main Mtce	2,095	1.50%	$ 1,720	$ 54,051	$ 54,051	$ 54,051	$ 54,051
6	Service Mtce	4,230	1.50%	$ 1,720	$ 109,134	$ 109,134	$ 109,134	$ 109,134
7	CP Field	3,123	1.50%	$ 1,720	$ 80,573	$ 80,573	$ 80,573	$ 80,573
8	L&M (Depth Checks)	994	1.50%	$ 1,720	$ 25,645	$ 25,645	$ 25,645	$ 25,645

Engineered Traffic Control Plan

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime FPA Rate	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
9	Main Mtce	2,128	7.00%	1	$ 59.94	$ 8,929	$ 8,929	$ 8,929	$ 8,929	0.09	0.09	0.09
10	Service Mtce	4,230	7.00%	1	$ 59.94	$ 17,748	$ 17,748	$ 17,748	$ 17,748	0.17	0.17	0.17
11	CP Field	3,123	7.00%	1	$ 59.94	$ 13,103	$ 13,103	$ 13,103	$ 13,103	0.11	0.11	0.11
12	L&M (Depth Checks)	994	7.00%	1	$ 59.94	$ 4,171	$ 4,171	$ 4,171	$ 4,171	0.04	0.04	0.04

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Engineered Traffic Control Plan (cont'd)

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
13	**Main Mtce**	2,128	7.00%	$ 250	$ 37,240	**$ 37,240**	**$ 37,240**	**$ 37,240**
14	**Service Mtce**	4,230	7.00%	$ 250	$ 74,025	**$ 74,025**	**$ 74,025**	**$ 74,025**
15	**CP Field**	3,123	7.00%	$ 250	$ 54,653	**$ 54,653**	**$ 54,653**	**$ 54,653**
16	**L&M (Depth Checks)**	994	7.00%	$ 250	$ 17,395	**$ 17,395**	**$ 17,395**	**$ 17,395**

Limits on Construction Hours

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (2 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
17	**Main Mtce**	2,095	3.00%	1	$ 100.71	$ 6,330	**$ 6,330**	**$ 6,330**	**$ 6,330**	0.1	0.1	0.1
18	**Service Mtce**	4,733	3.00%	1	$ 100.71	$ 14,300	**$ 14,300**	**$ 14,300**	**$ 14,300**	0.1	0.1	0.1
19	**CP Field**	3,123	3.00%	1	$ 100.71	$ 9,436	**$ 9,436**	**$ 9,436**	**$ 9,436**	0.1	0.1	0.1
20	**L&M (Depth Checks)**	994	3.00%	1	$ 100.71	$ 3,003	**$ 3,003**	**$ 3,003**	**$ 3,003**	0.03	0.03	0.03
21	**M&R - Med MSA**	21,095	17%	0.25	$ 48.26	$ 41,998	**$ 41,998**	**$ 41,998**	**$ 41,998**	0.4	0.4	0.4
22	**M&R - Lrg MSA**	17,393	16%	0.25	$ 111.66	$ 77,401	**$ 77,401**	**$ 77,401**	**$ 77,401**	0.8	0.8	0.8
23	**M&R-Distr Reg Sta**	1,534	50.00%	0.5	$ 111.66	$ 42,822	**$ 42,822**	**$ 42,822**	**$ 42,822**	0.4	0.4	0.4

Note: M&R Med MSA is single person

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
24	**Main Mtce**	2,095	3.00%	$ 550	$ 34,568	**$ 34,568**	**$ 34,568**	**$ 34,568**
25	**Service Mtce**	4,733	3.00%	$ 550	$ 78,095	**$ 78,095**	**$ 78,095**	**$ 78,095**
26	**CP Field**	3,123	3.00%	$ 550	$ 51,530	**$ 51,530**	**$ 51,530**	**$ 51,530**
27	**L&M (Depth Checks)**	994	3.00%	$ 550	$ 16,401	**$ 16,401**	**$ 16,401**	**$ 16,401**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Note: The assumptions for Increased Permit Fees and Construction Requirements and for Increased Paving Requirements are different from the assumptions above.

Non Labor Assumptions: [A]: Projected orders based on 2005-2009 average number of completed units of work. Using an average factors in the fluctuations in the completed work units over time.
[B]: Field evaluation/estimate of the impacts on the total number of units.
[C, D, E]: Due to steadily increasing permit fees and paving requirements, the estimated increase per order is based on average annual costs from 2005-2009 trended to TY2012.

Increased Permit Fees and Construction Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
28	**Main Mtce**	2,811	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 108,533**	**$ 155,842**	**$205,934**
29	**Service Mtce**	5,417	37.00%	$ 39.00	$ 56.00	$ 74.00	**$ 78,174**	**$ 112,250**	**$148,330**
30	**CP Field**	3,123	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 120,579**	**$ 173,139**	**$228,791**
31	**L&M (Depth Checks)**	994	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 38,378**	**$ 55,107**	**$ 72,820**

Increased Paving Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
32	**Main Mtce**	2,811	94.00%	$ 35.00	$ 73.00	$ 112.00	**$ 92,482**	**$ 192,891**	**$295,942**
33	**Service Mtce**	5,417	37.00%	$ 35.00	$ 73.00	$ 112.00	**$ 70,156**	**$ 146,326**	**$224,500**
34	**CP Field**	3,123	80.00%	$ 35.00	$ 73.00	$ 112.00	**$ 87,444**	**$ 182,383**	**$279,821**
35	**L&M (Depth Checks)**	994	50.00%	$ 35.00	$ 73.00	$ 112.00	**$ 17,395**	**$ 36,281**	**$ 55,664**

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Beginning of Workpaper
2GD000.001 - Pipeline O&M-Leak Survey

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub 2. Leak Survey
Workpaper: 2GD000.001 - Pipeline O&M-Leak Survey

Activity Description:

Recorded to this workgroup are the labor and non labor costs for leak survey activity. Federal pipeline safety regulation 49 CFR 192.723 requires SCG to survey its distribution systems for leaks. A leak surveyor routinely patrols above the identified location of SCG's distribution subsurface main and service pipelines with a leak detector at one, three and five year intervals to identify, classify and generate repair work orders for any leak indications found.

Forecast Methodology:

Labor - 5-YR Linear

A five-year trend is the most appropriate methodology to use in forecasting the TY2012 labor requirements for this work group. There has been a consistent increase in footage surveyed during the years 2005 through 2009, as a result of incremental distribution pipeline additions, and the requirement to survey this footage on one, three and five-year cycles. By utilizing a 5-year trend, the forecast will capture the labor increase necessary to meet the survey requirements of newly installed pipe. To the five year average foundation, incremental costs are forecasted as the result of new work elements related to increased city/municipality requirements.

Non-Labor - 5-YR Linear

A five-year trend is the most appropriate methodology to use in forecasting the TY2012 non labor requirements for this work group. There has been a consistent increase in footage surveyed during the years 2005 through 2009, as a result of additional distribution pipeline additions, and the requirement to survey this footage on one, three and five-year cycles. By utilizing a 5-year trend, the forecast will capture the non labor increase necessary to meet the survey requirements of newly installed pipe.

NSE - 5-YR Linear

NSE is not applicable to this work group.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	3,248	3,435	3,564	3,687	3,729	3,896	4,018	4,139
Non-Labor	1	11	9	9	2	6	6	6
NSE	0	0	0	0	0	0	0	0
Total	3,249	3,446	3,573	3,696	3,731	3,902	4,024	4,145
FTE	52.5	55.8	57.2	59.9	60.2	63.0	64.9	66.9

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 2. Leak Survey
Workpaper: 2GD000.001 - Pipeline O&M-Leak Survey

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	5-YR Linear	3,896	4,018	4,139	0	0	0	3,896	4,018	4,139
Non-Labor	5-YR Linear	6	6	6	0	0	0	6	6	6
NSE	5-YR Linear	0	0	0	0	0	0	0	0	0
Total		3,902	4,024	4,145	0	0	0	3,902	4,024	4,145
FTE	5-YR Linear	63.0	64.9	66.9	0.0	0.0	0.0	63.0	64.9	66.9

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010 Total	**0**	**0**	**0**	**0**	**0.0**	
2011 Total	**0**	**0**	**0**	**0**	**0.0**	
2012 Total	**0**	**0**	**0**	**0**	**0.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 2. Leak Survey
Workpaper: 2GD000.001 - Pipeline O&M-Leak Survey

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	2,455	2,678	2,863	3,015	3,127
Non-Labor	1	10	9	9	2
NSE	0	0	0	0	0
Total	2,456	2,688	2,872	3,024	3,130
FTE	44.5	47.2	48.4	50.0	50.6
Adjustments (Nominal $) **					
Labor	24	0	0	0	31
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	24	0	0	0	31
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	2,479	2,678	2,863	3,015	3,159
Non-Labor	1	10	9	9	2
NSE	0	0	0	0	0
Total	2,480	2,688	2,872	3,024	3,161
FTE	44.5	47.2	48.4	50.0	50.6
Vacation & Sick (Nominal $)					
Labor	423	479	500	581	571
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	423	479	500	581	571
FTE	8.0	8.6	8.8	9.9	9.6
Escalation to 2009$					
Labor	347	278	201	91	0
Non-Labor	0	1	0	0	0
NSE	0	0	0	0	0
Total	347	279	201	91	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	3,248	3,435	3,564	3,687	3,729
Non-Labor	1	11	9	9	2
NSE	0	0	0	0	0
Total	3,249	3,446	3,573	3,696	3,732
FTE	52.5	55.8	57.2	59.9	60.2

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 2. Leak Survey
Workpaper: 2GD000.001 - Pipeline O&M-Leak Survey

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	24	0	0	0	31
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	24	0	0	0	31
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj_Type	From CCtr	RefID
2005	24	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 8144059990

Adjustment necessary to reflect special leakage survey labor expense in appropriate work group. Corresponding adjustment (decrease) in Main Mtce work group 2GD000.003.

2005 Total	**24**	**0**	**0**	**0.0**			
2006 Total	**0**	**0**	**0**	**0.0**			
2007 Total	**0**	**0**	**0**	**0.0**			
2008 Total	**0**	**0**	**0**	**0.0**			
2009	31	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3085029187

Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.

2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3111527333

Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 2. Leak Survey
Workpaper: 2GD000.001 - Pipeline O&M-Leak Survey

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3112917430
Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.							
2009 Total	**31**	**0**	**0**	**0.0**			

Beginning of Workpaper
2GD002.000 - Measurement & Regulation

Area:	GAS DISTRIBUTION
Witness:	Orozco, Guillermina
Category:	A. Field Operations & Maintenance
Category-Sub	3. Measurement and Regulation
Workpaper:	2GD002.000 - Measurement & Regulation

Activity Description:

Recorded to the Measurement & Regulation (M&R) work group are labor and non labor expenses incurred by M&R personnel in maintaining meters, gauges and other equipment used in measuring and regulating gas in operation of the gas distribution system. This includes: inspection and maintenance of distribution regulator stations, valve maintenance, meter inspections, and electronic instrumentation testing and maintenance.

Forecast Methodology:

Labor - 5-YR Average

The majority of M&R inspection work is completed on a scheduled, routine basis. It is driven by compliance requirements and the inventory of facilities to be inspected. The unscheduled maintenance is reactive to the conditions found at the facility. While SCG's system continues to grow, the rate of growth is not expected to sufficiently influence the level of spending in this work group. To capture both the scheduled and unscheduled nature of the work completed in this work group a 5 year average is projected for TY2012 funding requirements. To the five year average foundation, incremental costs are forecasted as the result of: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; (3) increased city/municipality restrictions on working hours; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; (5) requirements to address aging regulator lids and vault maintenance work; and (6) increased odorant testing requirements.

Non-Labor - 5-YR Average

The majority of M&R inspection work is completed on a schedule and routine basis. It is driven by compliance requirements and the inventory of facilities to be inspected. The unscheduled maintenance is reactive to the conditions found at the facility. While SCG's system continues to grow, the rate of growth is not expected to sufficiently influence the level of spending in this work group. To capture both the scheduled and unscheduled nature of the work completed in this work group a 5 year average is projected for TY2012 funding requirements. To the five year average foundation, incremental costs are forecasted as the result of: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; (3) increased city/municipality restrictions on working hours; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; (5) requirements to address aging regulator lids and vault maintenance work; and (6) increased odorant testing requirements.

NSE - 5-YR Average

NSE is not applicable to this work group.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub 3. Measurement and Regulation
Workpaper: 2GD002.000 - Measurement & Regulation

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	8,948	9,180	8,718	8,377	8,821	9,798	10,101	10,107
Non-Labor	1,903	1,905	1,860	2,101	2,341	2,109	25,618	25,618
NSE	0	0	0	0	0	0	0	0
Total	10,851	11,085	10,578	10,478	11,162	11,907	35,719	35,725
FTE	121.5	125.3	119.0	115.8	117.1	128.7	131.8	131.9

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 3. Measurement and Regulation
Workpaper: 2GD002.000 - Measurement & Regulation

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	5-YR Average	8,808	8,808	8,808	990	1,293	1,299	9,798	10,101	10,107
Non-Labor	5-YR Average	2,022	2,022	2,022	87	23,596	23,596	2,109	25,618	25,618
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
Total		10,830	10,830	10,830	1,077	24,889	24,895	11,907	35,719	35,725
FTE	5-YR Average	119.7	119.7	119.7	9.0	12.1	12.2	128.7	131.8	131.9

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010	990	0	0	990	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; (3) increased city/municipality restrictions on working hours; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; (5) requirements to address aging regulator lids and vault maintenance work; (6) increased odorant testing requirements.

2010	0	87	0	87	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; and (3) requirements to address aging regulator lids and vault maintenance work.

2010	0	0	0	0	9.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; (3) increased city/municipality restrictions on working hours; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; (5) requirements to address aging regulator lids and vault maintenance work; (6) increased odorant testing requirements.

2010 Total	**990**	**87**	**0**	**1,077**	**9.0**	
2011	1,293	0	0	1,293	0.0	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 3. Measurement and Regulation
Workpaper: 2GD002.000 - Measurement & Regulation

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
A: Incremental funding required in the following areas: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; (3) increased city/municipality restrictions on working hours; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; (5) requirements to address aging regulator lids and vault maintenance work; (6) increased odorant testing requirements.						
2011	0	153	0	153	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; and (3) requirements to address aging regulator lids and vault maintenance work.						
2011	0	0	0	0	12.1	1-Sided Adj
A: Incremental funding required in the following areas: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; (3) increased city/municipality restrictions on working hours; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; (5) requirements to address aging regulator lids and vault maintenance work; (6) increased odorant testing requirements.						
2011	0	23,443	0	23,443	0.0	1-Sided Adj
New Environmental Regulatory Balancing Account						
2011 Total	**1,293**	**23,596**	**0**	**24,889**	**12.1**	
2012	1,299	0	0	1,299	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; (3) increased city/municipality restrictions on working hours; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; (5) requirements to address aging regulator lids and vault maintenance work; (6) increased odorant testing requirements.						
2012	0	154	0	154	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; and (3) requirements to address aging regulator lids and vault maintenance work.						

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 3. Measurement and Regulation
Workpaper: 2GD002.000 - Measurement & Regulation

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
2012	0	0	0	0	12.2	1-Sided Adj

A: Incremental funding required in the following areas: (1) costs required to address an aging infrastructure; (2) regulatory requirements for load surveys that result in increased MSA rebuilds; (3) increased city/municipality restrictions on working hours; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; (5) requirements to address aging regulator lids and vault maintenance work; (6) increased odorant testing requirements.

2012	0	23,442	0	23,442	0.0	1-Sided Adj

New Environmental Regulatory Balancing Account

2012 Total	**1,299**	**23,596**	**0**	**24,895**	**12.2**

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 3. Measurement and Regulation
Workpaper: 2GD002.000 - Measurement & Regulation

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	6,829	7,157	7,004	6,850	7,390
Non-Labor	1,695	1,759	1,774	2,106	2,341
NSE	0	0	0	0	0
Total	8,525	8,916	8,779	8,956	9,731
FTE	102.9	105.9	100.7	96.7	98.5
Adjustments (Nominal $) **					
Labor	0	0	0	0	81
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	81
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	6,829	7,157	7,004	6,850	7,471
Non-Labor	1,695	1,759	1,774	2,106	2,341
NSE	0	0	0	0	0
Total	8,525	8,916	8,779	8,956	9,812
FTE	102.9	105.9	100.7	96.7	98.5
Vacation & Sick (Nominal $)					
Labor	1,164	1,279	1,222	1,320	1,350
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	1,164	1,279	1,222	1,320	1,350
FTE	18.6	19.4	18.3	19.1	18.6
Escalation to 2009$					
Labor	955	744	492	207	0
Non-Labor	208	146	85	-5	0
NSE	0	0	0	0	0
Total	1,163	890	577	202	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	8,948	9,180	8,718	8,377	8,821
Non-Labor	1,903	1,905	1,860	2,101	2,341
NSE	0	0	0	0	0
Total	10,852	11,085	10,578	10,478	11,162
FTE	121.5	125.3	119.0	115.8	117.1

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 3. Measurement and Regulation
Workpaper: 2GD002.000 - Measurement & Regulation

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	0	0	0	0	81
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	81
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005 Total	**0**	**0**	**0**	**0.0**			
2006 Total	**0**	**0**	**0**	**0.0**			
2007 Total	**0**	**0**	**0**	**0.0**			
2008 Total	**0**	**0**	**0**	**0.0**			
2009	81	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3085624077

Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.

2009 Total	**81**	**0**	**0**	**0.0**			

Supplemental Workpapers for Workpaper 2GD002.000

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure

Aging Infrastructure - Replacement of Medium and Large MSAs (Diaphragm meters)
State regulation CPUC GO 58A requires that meter accuracy is maintained within certain parameters to ensure accurate billing to customers. Furthermore, GO 58A requires that customer meters provide adequate capacity and accurate volume registration. A specific class of meters used for many commercial and industrial customers are more than 20 years old and are reaching the end of their useful life. Starting in 2010 SCG will no longer field test these meters; instead, they will be replaced via PMCs. The calculation of the incremental costs to replace these meters are shown below.

Workgroups affecte **Measurement and Regulation (M&R)**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor
Annual number of medium and large meters scheduled for replacement x 2009 weighted average hours per replacement x M&R Technician overtime crew rate (based on labor agreement schedule).

Non-Labor
Annual number of medium and large meters scheduled for replacement x 2009 non labor cost per order.

Assumptions:

[A]: Annual orders is based upon scheduled orders obtained from the Measurement and Regulation System ("MARS").

[B] Annual labor hours per unit is based upon the 2009 hours per order which represents the most current operating conditions.

[C]: Overtime rate: Medium size meter change outs are done by a single M&R Technician, while large meter change-outs are done by a 2-person M&R crew for safety purposes.

[E]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[A]	[A]	[B]	[C]	[AxBxC]=[D]	[AxBxC]=[D]	[AxBxC]=[D]	[E]	[E]	[E]
Line #	Labor	2010 Annual Orders	2011 Annual Orders	2012 Annual Orders	Hours per Order	Overtime Rate	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	**Medium MSAs**	546	406	446	3.37	$ 48.26	$ 88,790	$ 66,023	$ 72,528	0.90	0.60	0.70
2	**Large MSAs**	72	200	201	3.99	$ 111.66	$ 11,709	$ 32,524	$ 32,686	0.2	0.4	0.3

Southern California Gas Company – Gas Distrubtion – Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure

Non-Labor Assumpt [A]: Estimated annual orders is based upon data from the Measurement and Regulation System ("MARS").

[B]: Based on 2009 cost per order. Includes miscellaneous materials required for meter change-out and does not include the meter cost as that is a capital purchase.

Line #	Non Labor	[A] 2010 Annual Orders	[A] 2011 Annual Orders	[A] 2012 Annual Orders	[B] Annual Cost per Order	[AxB] 2010	[AxB] 2011	[AxB] 2012
3	**Medium MSAs**	546	406	446	$ 25.64	**$ 13,999**	**$ 10,410**	**$ 11,435**
4	**Large MSAs**	72	200	201	$ 50.00	**$ 1,846**	**$ 5,128**	**$ 5,154**

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Supplemental Workpaper Calculations for incremental costs related to Regulatory Requirements

Regulatory Requirements - MSA rebuilds as a result of load survey
There are an estimated 800 MSAs that will be subject to being rebuilt annually as a result of more effective large-volume customer's load survey. Procedural changes to the load survey provide a more accurate measure of the customer's load and result in a higher number of MSA rebuilds. The calculation of the incremental costs to rebuild these MSAs are shown below.

Workgroups affected: **Measurement and Regulation (M&R)**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor
Annual number of MSA rebuilds x 2009 average hours per replacement x M&R Technician overtime crew rate.

Non-Labor
Annual number of MSA rebuilds x 2009 non labor cost per order.

Labor Assumptions:
[A]: Approximately 1600-1700 load surveys are issued annually. M&R personnel estimate that approximately 50% will result in MSA rebuilds.
[B]: Annual labor hours per unit is based upon the 2009 hours per order which represents the most current operating conditions.
[D]: Overtime rate: Small and medium MSAs are done by a single M&R technician, while large MSAs are done by a 2-person M&R crew.
[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[AxB]=[C]	[D]	[CxD]=[E]				[F]	[F]	[F]
Line #	Labor	Total Orders per Year	Annual Hours per Order	Total Annual Hours	Overtime Rate	Total Cost per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	Medium MSA Rebuilds	191	4.1	789	$ 48.26	$ 38,065	$ 38,065	$ 38,065	$ 38,065	0.4	0.4	0.4
2	Large MSA Rebuilds	609	6.6	3,995	$ 111.66	$ 446,086	$446,086	$446,086	$446,086	3.9	3.9	3.9

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Supplemental Workpaper Calculations for incremental costs related to Regulatory Requirements

Non-Labor Assumptions:

[A]: Approximately 1600-1700 load surveys are issued annually. M&R personnel estimate that approximately 50% will result in MSA rebuilds.
[B]: Based on 2009 cost per order which represents the most current operationg conditions. Includes costs for miscellaneous materials required for MSA rebuilds.

Line #	Non Labor	[A] Total Orders per Year	[B] Annual Cost per Order	[AxB]=[C] Total Cost per Year	2010	2011	2012
3	Medium MSA Rebuilds	191	$ 50.00	$ 9,550	$ 9,550	$ 9,550	$ 9,550
4	Large MSA Rebuilds	609	$ 75.00	$ 45,675	$ 45,675	$ 45,675	$ 45,675

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Supplemental Workpaper Calculations for incremental costs related to Safety

Safety - Odorant Testing
SCG conducts odorant testing as a safety measure to ensure that new equipment (meters, regulators, valves, etc.) connected to the houseline are odorized. This odorization is necessary so that if there is a gas leak, it is detectable by smell. When new MSA components are installed they must be checked to ensure they are properly odorized. Recently SCG has moved to a more stringent application of this policy to improve public safety. The additional odorization check time increases the cost of the work. The calculation of the incremental costs are shown below.

Workgroups affected: **Measurement and Regulation (M&R)**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor
Annual number of hours x M&R overtime crew rate.

Non Labor
There are no non labor costs associated with this work.

Assumptions:

[A]: Estimated annual orders based upon the 2009 meter change-outs. The 2009 orders were used as a forecast basis as the numbers represent the most current number of units.

[B]: Annual labor hours are based upon an incremental 3 minutes for medium MSAs multiplied by the number of orders per year. This is based on the assessment of the amount of time required for this work, as estimated by M&R personnel.

[C]: Overtime rate: Medium size meter change-outs are done by a single M&R Technician, while large meter changes-outs are done by a 2-person M&R crew.

[E]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[BxC]=[D]				[E]	[E]	[E]
Line #	Labor	Total Orders per Year	Total Annual Hours	Overtime Rate	Total Cost per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	Odorant Testing Medium MSA	3,551	178	$ 48.26	$ 8,568	**$ 8,568**	**$ 8,568**	**$ 8,568**	0.1	0.1	0.1
2	Odorant Testing Large MSA	4,453	445	$ 111.66	$ 49,722	$ 49,722	$ 49,722	$ 49,722	0.4	0.4	0.4

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Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure

Aging Infrastructure - Regulator Station lid and vault maintenance

A large number of SCG's regulator stations are installed in underground vaults in order to protect them from tampering and vehicular damage. As the vaults that house regulator stations and MSAs age, they begin to crack thereby increasing the potential for safety hazards. These facilities are requiring more repairs or the rebuilding of worn, warped or cracked vaults and lids. SCG will replace lids and repair the vaults prior to them becoming a safety hazard. The calculation of the incremental costs to repair these vaults are shown below.

Workgroups affected: **Measurement and Regulation (M&R)**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor
Annual number of vault repairs x estimated average hours per replacement x M&R overtime crew rate.

Non-Labor
Annual number of vault repairs x 2009 non labor cost per order.

Labor Assumptions:

[A]: Annual orders based upon field input of the total number of vaults requiring repairs divided by 3 as this work will be be scheduled over a three year period, beginning in 2010. Note that as the infrastructure continues to age, other vaults, beyond the 42 currently identified, may require lid repairs.
[D]: Overtime rate for a 2-person M&R crew.
[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[AxB]=[C]	[D]	[CxD]=[E]				[F]	[F]	[F]
Line #	Labor	Total Orders per Year	Annual Hours per Order	Total Annual Hours	Overtime Hourly Rate	Total Cost per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	Vault Repairs	14	4.0	56	$ 111.66	$ 6,253	$ 6,253	$ 6,253	$ 6,253	0.1	0.1	0.1

Non-Labor Assumptions:

[A]: Annual orders based upon field input of the total number of vaults requiring repairs divided by 3 as this work will be be scheduled over a three year period, beginning in 2010. Note that as the infrastructure continues to age, other vaults, beyond the 42 currently identified, may require lid repairs.

[B]: Based on 2009 cost per order as this represents the most current operating conditions. Costs include materials such as concrete, vault lids, and other miscellaneous materials required to complete the repairs.

		[A]	[B]	[AxB]			
Line #	Non Labor	Total Orders per Year	Annual Cost per Order	Total Cost per Year	2010	2011	2012
2	Vault Repairs	14	$ 1,133.50	$ 15,869	$ 15,869	$ 15,869	$ 15,869

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Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure

Aging Infrastructure - Replacement of regulators on Reg Stations

Federal regulation DOT 49 C.F.R. 192.739 requires that District Reg Stations (DRS) be routinely inspected and maintained to ensure that they are in good mechanical condition and adequately provide service capacity and reliable operation. Certain models of pressure regulators that are used in DRSs have been in service for over 25 years and have become obsolete. There are approximately 1668 regulators that will be replaced over a five year period, beginning in 2011. The calculation of the incremental costs to replace these regulators are shown below.

Workgroups affected: **Measurement and Regulation (M&R)**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor
Annual number of regulators scheduled for replacement x 2009 average hours per replacement x M&R Technician overtime crew rate.

Non-Labor
Annual number of regulators scheduled for replacement x 2009 non labor cost per order.

Labor Assumptions:

[A]: Annual orders is based upon the number of obsolete regulators obtained from the Measurement and Regulation System ("MARS") divided by 5 as this program will take place over a five year period, beginning in 2011.
[B]: Annual labor hours per unit is based upon the 2009 hours per order which represents the most current operating conditions.
[D]: Overtime rate for M&R Technician 1
[E]: Labor cost for regulators scheduled for replacement beginning in 2011
[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[AxB]=[C]	[D]	[CxD]=E				[F]	[F]	[F]
Line #	Labor	Total Orders per Year	Annual Hours per Order	Total Annual Hours	M&R Tech 1 Overtime Rate	Total Cost per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	Regulator Replacement	334	18.9	6,305	$ 48.26	$ 304,250	$ -	$304,250	$304,250	0	3.3	3.3

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Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure

Non-Labor Assumptions:

[A]: Annual orders is based upon the number of obsolete regulators obtained from the Measurement and Regulation System ("MARS") divided by 5 as this program will take place over a five year period, beginning in 2011.

[B]: Based on 2009 cost per order which represents the most current operating conditions. Includes costs for miscellaneous materials required for regulator replacement and does not include the regulator cost as that is a capital purchase.

[C]: Non Labor cost for regulators scheduled for replacement beginning in 2011

		[A]	[B]	[AxB]=[C]			
Line #	Non Labor	Total Orders per Year	Annual Cost per Order	Total Cost per Year	2010	2011	2012
2	Regulator Replacement	334	$ 199.75	$ 66,637	$ -	$ 66,637	$66,637

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Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Pedestrian Access at Construction Sites
During hearings on SCG's TY2008 GRC, SCG entered into an agreement with the Disability Rights Advocates (DiRA) to modify SCG's field practices providing for safe pedestrian access around construction sites for disabled individuals. Since that agreement was signed SCG, working with DiRA, has identified materials and procedural changes that address DiRA's concerns. To effectively integrate these changes into daily operations required the purchase of specialized barricades and ramps to be used at the construction site, additional field training on proper use and placement of these devices, and incremental preparation including set up and tear down time at the job site. The calculation of these incremental costs are shown below.

Training Costs: **Includes the inital training for employees to learn how to appropriately construct and dismantle the percautionary devices (ramps and baricades) plus the annual review of this procedure. Initial instruction and annual review will be done at the base location and scheduled by local management. All impacted field employees will be expected to have recieved this training and review.**

Workgroups affected: **Pipeline O&M Field Support**

Methodology: Training for platform contruction and dismantling is calculated as follows:
Count of impacted field employees x average combined rate of impacted employees (based on Labor Agreement schedule) x training duration.

Assumptions:

[A]: Based on impacted classifications, 620 employees have been identified as requiring knowledge to construct and dismantle materials.

[B]: Overtime weighted average labor rate of impacted employees.

[C]: Time required to either complete the intial instruction sessions or the annual review requirements.

[E]: 50% of employee base is anticipated to receive initial training during 2010. The remaining 50% will receive instruction during 2011. Annual review will begin in 2011 and continue into 2012 will all employees in 2012 (and forward) receiving annual review.

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

Line #		[A] Impacted Employee Count	[B] Avg. Overtime Pay Rate	[C] Training Duration (Hrs)	[A x B x C]=[D] Total per Year	[E] 2010	[E] 2011	[E] 2012	[F] 2010 FTE	[F] 2011 FTE	[F] 2012 FTE
1	Initial Instruction	620	$ 50.77	2	$ 62,950	$ 31,475	$ 31,475	$ -	0.5	0.5	0
2	Annual Review	620	$ 50.77	0.5	$ 15,737	$ -	$ 7,869	$ 7,869	0	0.04	0.04
					Total Requirement	**$ 31,475**	**$ 39,343**	**$ 7,869**	0.5	0.54	0.04

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Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Set up and Dismantling Costs

Workgroups affected:

- **Main Maintenance**
- **Service Maintenance**
- **Cathodic Protection**
- **Measurement & Regulation**

Methodology: The average hourly rate was Incremental time for platform contruction and dismantling is calculated as follows: Total Orders x Estimated percent of total orders requiring DiRA application x Estimated hours to set-up and dismantle equipment x Overtime Crew Rate (2 person)

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders

[B]: Estimated percent of total orders that will require the additional pedestrian access barricades. Based on local field managements assessment of the impact

[C]: Estimated hours to set up related equipment for these orders is 3.5 hrs. This figure was determined by the time it took the manufacturer to set up the equipment during a demonstration (1.75 hours set up only). Since field conditions are less complex for M&R work, the configuration requirements are signficantly less; therefore, M&R work was estimated to take half the time to set up and dismantle (1.75 hrs).

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[D]	[AxBxCxD]=[E]				[F]	[F]	[F]
Line #	Work Group	Total Orders per Year	Percent Requiring Set-up	Work Duration (Hrs)	Overtime Crew Rate (2 person)	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
3	**Main Maintenance**	2,095	4.41%	3.5	$ 100.71	$ 32,566	**$ 32,566**	**$ 32,566**	**$ 32,566**	0.3	0.3	0.3
4	**Service Maintenance**	7,653	6.80%	3.5	$ 100.71	$ 183,430	**$ 183,430**	**$ 183,430**	**$183,430**	1.8	1.8	1.8
5	**Cathodic Protection**	3,123	7.90%	3.5	$ 100.71	$ 86,964	**$ 86,964**	**$ 86,964**	**$ 86,964**	0.8	0.8	0.8
6	**M&R-Dist. Reg. Station**	1,989	46.00%	1.75	$ 111.66	$ 178,784	**$ 178,784**	**$ 178,784**	**$178,784**	1.4	1.4	1.4

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Increased City/Municipality Requirements

The construction, operation and maintenance of SCG's vast pipeline system require interaction and compliance with numerous local, state, and federal legislative and regulatory agencies. These agencies continue to impose new and often more stringent administrative planning and field construction operating conditions that can result in increased cost pressures to maintain the gas distribution system. These recent changes in municipality requirements that have led to cost increases for SCG due to mandated night work, engineered traffic control plans, limits on construction hours, increased construction permit costs and increased paving requirements. The calculation of these incremental costs are shown below.

Workgroups affected:

> **Main Maintenance**
> **Service Maintenance**
> **Cathodic Protection**
> **Locate and Mark (Depth Checks)**
> **Measurement & Regulation (M&R): Limits on construction hours only**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated work duration x overtime crew rates

Non-Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated non labor expenses

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units over time.

[B]: Estimated percent of total work units that will be impacted is based on assessment by the operating districts currently experiencing the restrictions.

[C]: Estimated additional hours required to comply with the City/Municipality restrictions. The calculation for durations of work were based on responses by the operating districts currently experiencing the restrictions.

[E] FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

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Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Non Labor Assumptions: [A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units.
[B]: Based upon field assessment of the impacts on the total number of orders.
[C]: Non labor costs are made up of:
Estimated 3rd party contractor labor (provided by operating district personnel)
Historical average costs for 3rd party rentals (night lights, steel plates, etc.)

Night work

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (3 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
1	Main Mtce	2,095	1.50%	1	$ 145.59	$ 4,575	$ 4,575	$ 4,575	$ 4,575	0.05	0.05	0.05
2	Service Mtce	4,230	1.50%	1	$ 145.59	$ 9,238	$ 9,238	$ 9,238	$ 9,238	0.09	0.09	0.09
3	CP Field	3,123	1.50%	1	$ 145.59	$ 6,820	$ 6,820	$ 6,820	$ 6,820	0.06	0.06	0.06
4	L&M (Depth Checks)	994	1.50%	1	$ 146.59	$ 2,186	$ 2,186	$ 2,186	$ 2,186	0.02	0.02	0.02

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
5	Main Mtce	2,095	1.50%	$ 1,720	$ 54,051	$ 54,051	$ 54,051	$ 54,051
6	Service Mtce	4,230	1.50%	$ 1,720	$ 109,134	$ 109,134	$ 109,134	$ 109,134
7	CP Field	3,123	1.50%	$ 1,720	$ 80,573	$ 80,573	$ 80,573	$ 80,573
8	L&M (Depth Checks)	994	1.50%	$ 1,720	$ 25,645	$ 25,645	$ 25,645	$ 25,645

Engineered Traffic Control Plan

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime FPA Rate	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
9	Main Mtce	2,128	7.00%	1	$ 59.94	$ 8,929	$ 8,929	$ 8,929	$ 8,929	0.09	0.09	0.09
10	Service Mtce	4,230	7.00%	1	$ 59.94	$ 17,748	$ 17,748	$ 17,748	$ 17,748	0.17	0.17	0.17
11	CP Field	3,123	7.00%	1	$ 59.94	$ 13,103	$ 13,103	$ 13,103	$ 13,103	0.11	0.11	0.11
12	L&M (Depth Checks)	994	7.00%	1	$ 59.94	$ 4,171	$ 4,171	$ 4,171	$ 4,171	0.04	0.04	0.04

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Engineered Traffic Control Plan (cont'd)

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
13	**Main Mtce**	2,128	7.00%	$ 250	$ 37,240	**$ 37,240**	**$ 37,240**	**$ 37,240**
14	**Service Mtce**	4,230	7.00%	$ 250	$ 74,025	**$ 74,025**	**$ 74,025**	**$ 74,025**
15	**CP Field**	3,123	7.00%	$ 250	$ 54,653	**$ 54,653**	**$ 54,653**	**$ 54,653**
16	**L&M (Depth Checks)**	994	7.00%	$ 250	$ 17,395	**$ 17,395**	**$ 17,395**	**$ 17,395**

Limits on Construction Hours

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (2 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
17	**Main Mtce**	2,095	3.00%	1	$ 100.71	$ 6,330	**$ 6,330**	**$ 6,330**	**$ 6,330**	0.1	0.1	0.1
18	**Service Mtce**	4,733	3.00%	1	$ 100.71	$ 14,300	**$ 14,300**	**$ 14,300**	**$ 14,300**	0.1	0.1	0.1
19	**CP Field**	3,123	3.00%	1	$ 100.71	$ 9,436	**$ 9,436**	**$ 9,436**	**$ 9,436**	0.1	0.1	0.1
20	**L&M (Depth Checks)**	994	3.00%	1	$ 100.71	$ 3,003	**$ 3,003**	**$ 3,003**	**$ 3,003**	0.03	0.03	0.03
21	**M&R - Med MSA**	21,095	17%	0.25	$ 48.26	$ 41,998	**$ 41,998**	**$ 41,998**	**$ 41,998**	0.4	0.4	0.4
22	**M&R - Lrg MSA**	17,393	16%	0.25	$ 111.66	$ 77,401	**$ 77,401**	**$ 77,401**	**$ 77,401**	0.8	0.8	0.8
23	**M&R-Distr Reg Sta**	1,534	50.00%	0.5	$ 111.66	$ 42,822	**$ 42,822**	**$ 42,822**	**$ 42,822**	0.4	0.4	0.4

Note: M&R Med MSA is single person

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
24	**Main Mtce**	2,095	3.00%	$ 550	$ 34,568	**$ 34,568**	**$ 34,568**	**$ 34,568**
25	**Service Mtce**	4,733	3.00%	$ 550	$ 78,095	**$ 78,095**	**$ 78,095**	**$ 78,095**
26	**CP Field**	3,123	3.00%	$ 550	$ 51,530	**$ 51,530**	**$ 51,530**	**$ 51,530**
27	**L&M (Depth Checks)**	994	3.00%	$ 550	$ 16,401	**$ 16,401**	**$ 16,401**	**$ 16,401**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Note: The assumptions for Increased Permit Fees and Construction Requirements and for Increased Paving Requirements are different from the assumptions above.

Non Labor Assumptions: [A]: Projected orders based on 2005-2009 average number of completed units of work. Using an average factors in the fluctuations in the completed work units over time.
[B]: Field evaluation/estimate of the impacts on the total number of units.
[C, D, E]: Due to steadily increasing permit fees and paving requirements, the estimated increase per order is based on average annual costs from 2005-2009 trended to TY2012.

Increased Permit Fees and Construction Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
28	**Main Mtce**	2,811	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 108,533**	**$ 155,842**	**$205,934**
29	**Service Mtce**	5,417	37.00%	$ 39.00	$ 56.00	$ 74.00	**$ 78,174**	**$ 112,250**	**$148,330**
30	**CP Field**	3,123	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 120,579**	**$ 173,139**	**$228,791**
31	**L&M (Depth Checks)**	994	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 38,378**	**$ 55,107**	**$ 72,820**

Increased Paving Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
32	**Main Mtce**	2,811	94.00%	$ 35.00	$ 73.00	$ 112.00	**$ 92,482**	**$ 192,891**	**$295,942**
33	**Service Mtce**	5,417	37.00%	$ 35.00	$ 73.00	$ 112.00	**$ 70,156**	**$ 146,326**	**$224,500**
34	**CP Field**	3,123	80.00%	$ 35.00	$ 73.00	$ 112.00	**$ 87,444**	**$ 182,383**	**$279,821**
35	**L&M (Depth Checks)**	994	50.00%	$ 35.00	$ 73.00	$ 112.00	**$ 17,395**	**$ 36,281**	**$ 55,664**

Southern California Gas Company
Gas Distribution Witness Ms. Gina Orozco-Mejia
Supplemental Work paper Calculations – Measurement & Regulation

SCG Gas Distribution Subpart W O&M Cost Estimate:

The estimated cost for upward pressure of annual labor for GHG Subpart W compliance is $23.44 million for SCG based on conducting a field survey at each of the 93,270 above ground M&R sites within one year.

This cost estimate is based on the incremental costs over and above the current level of inspections performed today at these locations. The estimated incremental annual maintenance cost per station is $300 per station.

93,270 SCG sites – 15,123 sites = 78,147 SCG M&R sites requiring GHG inspections

- 93,270 is the number of M&R sites requiring inspection to meet compliance with GHG Subpart W
- 15,123 is the current number of schedule annual M&R site inspections being conducted at SCG
- 78,147 is the upward pressure of additional M&R site inspections

$75/hr x 8 hrs/day = $600/day or $300 dollars per M&R site

- $75/hr. is based on assumed hourly value for contractors.
- It is estimated that an inspector can conduct 2 field M&R inspections per day.
- $300 per M&R site inspection x 78,147 M&R sites = $23.44 million

The total upward labor pressure for Subpart W M&R related inspections for SCG is $23.44 million

Beginning of Workpaper
2GD000.006 - Pipeline O&M-Cathodic Protection Field

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub 4. Cathodic Protection Field
Workpaper: 2GD000.006 - Pipeline O&M-Cathodic Protection Field

Activity Description:

Cathodic Protection (CP) is applied to buried steel pipelines to prevent corrosion. CP combats corrosion by imposing an electric current flow toward the surface of the pipeline which results in reduced corrosion on the pipeline system. Corrosion on pipelines increases the potential for leaks, and may reduce the useful life of the pipelines. Recorded to this work group are the labor and non labor expenses for the district field operations to perform maintenance work on the CP systems. This can include activities such as: anode replacement, clearing of underground shorts, repairing broken wires, adding test points on CP areas, and installing insulators.

Forecast Methodology:

Labor - 5-YR Average

A five year average is the most appropriate methodology to use in forecasting the TY2012 labor requirements for this work group. CP maintenance expenses will fluctuate because they are reactive to the conditions found on the pipeline system. An average will factor in the high and low maintenance years, resulting from infrastructure condition. To the five year average foundation, incremental costs are forecasted as the result: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (3) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

Non-Labor - 5-YR Average

A five year average is the most appropriate methodology to use in forecasting the TY2012 non labor requirements for this work group. CP maintenance expenses will fluctuate due to the condition of the system and necessary corrective work. Non labor is representative of the materials needed to complete this maintenance work. As with labor, an average will factor in the high and low maintenance years, resulting from the required infrastructure needs. To the five year average foundation, incremental costs are forecasted as the result of: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (3) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

NSE - 5-YR Average

NSE is not applicable to this work group.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	830	685	970	1,038	896	1,011	1,011	1,011
Non-Labor	1,163	928	1,228	1,469	1,311	1,635	1,782	1,935
NSE	0	0	0	0	0	0	0	0
Total	1,993	1,613	2,198	2,507	2,207	2,646	2,793	2,946
FTE	12.6	10.4	14.7	15.8	13.3	14.7	14.7	14.7

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 4. Cathodic Protection Field
Workpaper: 2GD000.006 - Pipeline O&M-Cathodic Protection Field

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	5-YR Average	883	883	883	128	128	128	1,011	1,011	1,011
Non-Labor	5-YR Average	1,219	1,219	1,219	416	563	716	1,635	1,782	1,935
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
Total		2,102	2,102	2,102	544	691	844	2,646	2,793	2,946
FTE	5-YR Average	13.4	13.4	13.4	1.3	1.3	1.3	14.7	14.7	14.7

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010	128	0	0	128	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (3) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

2010	0	0	0	0	1.3	1-Sided Adj

A: Incremental funding required in the following areas: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (3) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

2010	0	416	0	416	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

2010 Total	**128**	**416**	**0**	**544**	**1.3**	
2011	128	0	0	128	0.0	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 4. Cathodic Protection Field
Workpaper: 2GD000.006 - Pipeline O&M-Cathodic Protection Field

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
A: Incremental funding required in the following areas: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (3) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.						
2011	0	563	0	563	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.						
2011	0	0	0	0	1.3	1-Sided Adj
A: Incremental funding required in the following areas: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (3) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.						
2011 Total	**128**	**563**	**0**	**691**	**1.3**	
2012	128	0	0	128	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (3) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.						
2012	0	716	0	716	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities						
2012	0	0	0	0	1.3	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 4. Cathodic Protection Field
Workpaper: 2GD000.006 - Pipeline O&M-Cathodic Protection Field

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
Incremental FTEs required in the following areas: (1) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (2) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (3) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.						
2012 Total	**128**	**716**	**0**	**844**	**1.3**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 4. Cathodic Protection Field
Workpaper: 2GD000.006 - Pipeline O&M-Cathodic Protection Field

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	633	534	779	849	748
Non-Labor	987	803	1,118	1,401	1,263
NSE	0	0	0	0	0
Total	1,621	1,338	1,897	2,250	2,010
FTE	10.7	8.8	12.4	13.2	11.2
Adjustments (Nominal $) **					
Labor	0	0	0	0	11
Non-Labor	49	53	54	72	49
NSE	0	0	0	0	0
Total	49	53	54	72	60
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	633	534	779	849	759
Non-Labor	1,036	856	1,172	1,473	1,311
NSE	0	0	0	0	0
Total	1,669	1,391	1,951	2,322	2,070
FTE	10.7	8.8	12.4	13.2	11.2
Vacation & Sick (Nominal $)					
Labor	108	95	136	164	137
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	108	95	136	164	137
FTE	1.9	1.6	2.3	2.6	2.1
Escalation to 2009$					
Labor	89	56	55	26	0
Non-Labor	127	71	56	-4	0
NSE	0	0	0	0	0
Total	216	127	111	22	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	830	685	970	1,038	896
Non-Labor	1,163	928	1,228	1,469	1,311
NSE	0	0	0	0	0
Total	1,993	1,613	2,198	2,508	2,208
FTE	12.6	10.4	14.7	15.8	13.3

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 4. Cathodic Protection Field
Workpaper: 2GD000.006 - Pipeline O&M-Cathodic Protection Field

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	0	0	0	0	11
Non-Labor	49	53	54	72	49
NSE	0	0	0	0	0
Total	49	53	54	72	60
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj_Type	From CCtr	RefID
2005	0	49	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1132142043

Adjustment (increase) due to Cathodic Protection non labor expense not reflected in 2GD000.006 work group. Corresponding adjustment (credit) can be found in 2GD000.003 Mains work group.

2005 Total	**0**	**49**	**0**	**0.0**

2006	0	53	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1132945447

Adjustment (increase) needed to appropriately reflect Cathodic Protection non labor which was originally shown in 2GD000.003. Thus a corresponding adjustment (reduction) can be found in said work group.

2006 Total	**0**	**53**	**0**	**0.0**

2007	0	54	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1133102277

Adjustment (increase) needed to appropriately reflect Cathodic Protection non labor which was originally shown in 2GD000.003. Thus a corresponding adjustment (reduction) can be found in said work group.

2007 Total	**0**	**54**	**0**	**0.0**

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 4. Cathodic Protection Field
Workpaper: 2GD000.006 - Pipeline O&M-Cathodic Protection Field

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2008	0	72	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1133205573

Adjustment (increase) needed to appropriately reflect Cathodic Protection non labor which was originally shown in 2GD000.003. Thus a corresponding adjustment (reduction) can be found in said work group.

2008 Total	**0**	**72**	**0**	**0.0**			
2009	0	49	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 3145033670

Adjustment needed to appropriately reflect Cathodic Protection Non Labor which was originally shown in 2GD000.003 Main Mtce work group. Thus a corresponding adjustment can be found in said work group.

2009	11	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3085517170

Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.

2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3113240417

Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.

2009 Total	**11**	**49**	**0**	**0.0**			

Supplemental Workpapers for Workpaper 2GD000.006

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Pedestrian Access at Construction Sites
During hearings on SCG's TY2008 GRC, SCG entered into an agreement with the Disability Rights Advocates (DiRA) to modify SCG's field practices providing for safe pedestrian access around construction sites for disabled individuals. Since that agreement was signed SCG, working with DiRA, has identified materials and procedural changes that address DiRA's concerns. To effectively integrate these changes into daily operations required the purchase of specialized barricades and ramps to be used at the construction site, additional field training on proper use and placement of these devices, and incremental preparation including set up and tear down time at the job site. The calculation of these incremental costs are shown below.

Training Costs: **Includes the inital training for employees to learn how to appropriately construct and dismantle the percautionary devices (ramps and baricades) plus the annual review of this procedure. Initial instruction and annual review will be done at the base location and scheduled by local management. All impacted field employees will be expected to have recieved this training and review.**

Workgroups affected: **Pipeline O&M Field Support**

Methodology: Training for platform contruction and dismantling is calculated as follows:
Count of impacted field employees x average combined rate of impacted employees (based on Labor Agreement schedule) x training duration.

Assumptions:
[A]: Based on impacted classifications, 620 employees have been identified as requiring knowledge to construct and dismantle materials.
[B]: Overtime weighted average labor rate of impacted employees.
[C]: Time required to either complete the intial instruction sessions or the annual review requirements.
[E]: 50% of employee base is anticipated to receive initial training during 2010. The remaining 50% will receive instruction during 2011. Annual review will begin in 2011 and continue into 2012 will all employees in 2012 (and forward) receiving annual review.
[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

Line #		[A] Impacted Employee Count	[B] Avg. Overtime Pay Rate	[C] Training Duration (Hrs)	[A x B x C]=[D] Total per Year	[E] 2010	[E] 2011	[E] 2012	[F] 2010 FTE	[F] 2011 FTE	[F] 2012 FTE
1	Initial Instruction	620	$ 50.77	2	$ 62,950	$ 31,475	$ 31,475	$ -	0.5	0.5	0
2	Annual Review	620	$ 50.77	0.5	$ 15,737	$ -	$ 7,869	$ 7,869	0	0.04	0.04
					Total Requirement	**$ 31,475**	**$ 39,343**	**$ 7,869**	0.5	0.54	0.04

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Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Set up and Dismantling Costs

Workgroups affected:

- **Main Maintenance**
- **Service Maintenance**
- **Cathodic Protection**
- **Measurement & Regulation**

Methodology: The average hourly rate was Incremental time for platform contruction and dismantling is calculated as follows: Total Orders x Estimated percent of total orders requiring DiRA application x Estimated hours to set-up and dismantle equipment x Overtime Crew Rate (2 person)

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders

[B]: Estimated percent of total orders that will require the additional pedestrian access barricades. Based on local field managements assessment of the impact

[C]: Estimated hours to set up related equipment for these orders is 3.5 hrs. This figure was determined by the time it took the manufacturer to set up the equipment during a demonstration (1.75 hours set up only). Since field conditions are less complex for M&R work, the configuration requirements are signficantly less; therefore, M&R work was estimated to take half the time to set up and dismantle (1.75 hrs).

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[D]	[AxBxCxD]=[E]				[F]	[F]	[F]
Line #	Work Group	Total Orders per Year	Percent Requiring Set-up	Work Duration (Hrs)	Overtime Crew Rate (2 person)	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
3	**Main Maintenance**	2,095	4.41%	3.5	$ 100.71	$ 32,566	**$ 32,566**	**$ 32,566**	**$ 32,566**	0.3	0.3	0.3
4	**Service Maintenance**	7,653	6.80%	3.5	$ 100.71	$ 183,430	**$ 183,430**	**$ 183,430**	**$183,430**	1.8	1.8	1.8
5	**Cathodic Protection**	3,123	7.90%	3.5	$ 100.71	$ 86,964	**$ 86,964**	**$ 86,964**	**$ 86,964**	0.8	0.8	0.8
6	**M&R-Dist. Reg. Station**	1,989	46.00%	1.75	$ 111.66	$ 178,784	**$ 178,784**	**$ 178,784**	**$178,784**	1.4	1.4	1.4

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding

Federal Stimulus Funding
The American Recovery and Reinvestment Act of 2009 provided funding to local and state agencies to construct mobility projects that bring value to the local, state and federal economy. This Act apportioned funds to California for highways, local streets and roads, freight and passenger rail, port infrastructure, and transit projects. As Stimulus Funding projects are constructed in local streets and highways, SCG anticipates that this work will result in a greater number of work orders. The calculation of these incremental costs are shown below.

Workgroups affected:

> **Locate and Mark (Depth Checks)**
> **Main Maintenance**
> **Service Maintenance**
> **Cathodic Protection**

Methodology:

The cost for additional labor and non labor in workgroups Locate & Mark, Main Maintenance and Service Maintenance was calculated as follows:

Labor
Total estimated work units x 2005-2009 average hours per unit x overtime labor rate of impacted employees.

Non-Labor
Total estimated work units x 2005-2009 average annual non labor cost per unit.

Note: Work units are either work orders or miles of Main

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Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding

Assumptions:

[A]: Estimated number of units were derived based on stimulus work data received from survey of field managers. The results reflect responses from District managers who have, or expect to have, Federal Stimulus projects in their area.

[B]: 2005-2009 average hours per unit.

[C]: Overtime rate of impacted employees

[E]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[AxBxC]=[D]				[E]	[E]	[E]
Line #	Labor	Estimated Annual Units	Hours per Unit	Overtime Rate	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	L&M (Depth Checks)	60	12	$100.71	$72,511	$72,511	$72,511	$72,511	0.7	0.7	0.7
2	Main Maintenance	17	31	$100.71	$53,524	$53,524	$53,524	$53,524	0.5	0.5	0.5
3	Service Maintenance	43	9	$100.71	$39,528	$39,528	$39,528	$39,528	0.4	0.4	0.4
4	Cathodic Protection	193	1.28	$ 48.26	$11,962	$11,962	$11,962	$11,962	0.2	0.2	0.2

Assumptions:

[A]: Estimated number of units were derived based on stimulus work data received from survey of field managers. The results reflect responses from District managers who have, or expect to have, Federal Stimulus projects in their area.

[B]: 2005-2009 average non labor cost per unit.

		[A]	[B]	[A x B]			
Line #	Non Labor	Estimated Annual Units	Avg Annual Non Labor Cost Per Unit	Total per Year	2010	2011	2012
5	L&M (Depth Checks)	60	$ 171.00	$10,260	$10,260	$10,260	$10,260
6	Main Maintenance	17	$ 710.63	$12,081	$12,081	$12,081	$12,081
7	Service Maintenance	43	$ 172.08	$ 7,399	$ 7,399	$ 7,399	$ 7,399
8	Cathodic Protection	193	$ 107.58	$20,762	$20,762	$20,762	$20,762

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Increased City/Municipality Requirements

The construction, operation and maintenance of SCG's vast pipeline system require interaction and compliance with numerous local, state, and federal legislative and regulatory agencies. These agencies continue to impose new and often more stringent administrative planning and field construction operating conditions that can result in increased cost pressures to maintain the gas distribution system. These recent changes in municipality requirements that have led to cost increases for SCG due to mandated night work, engineered traffic control plans, limits on construction hours, increased construction permit costs and increased paving requirements. The calculation of these incremental costs are shown below.

Workgroups affected:

> **Main Maintenance**
> **Service Maintenance**
> **Cathodic Protection**
> **Locate and Mark (Depth Checks)**
> **Measurement & Regulation (M&R): Limits on construction hours only**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated work duration x overtime crew rates

Non-Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated non labor expenses

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units over time.

[B]: Estimated percent of total work units that will be impacted is based on assessment by the operating districts currently experiencing the restrictions.

[C]: Estimated additional hours required to comply with the City/Municipality restrictions. The calculation for durations of work were based on responses by the operating districts currently experiencing the restrictions.

[E] FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Non Labor Assumptions: [A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units.
[B]: Based upon field assessment of the impacts on the total number of orders.
[C]: Non labor costs are made up of:
Estimated 3rd party contractor labor (provided by operating district personnel)
Historical average costs for 3rd party rentals (night lights, steel plates, etc.)

Night work

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (3 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
1	Main Mtce	2,095	1.50%	1	$ 145.59	$ 4,575	$ 4,575	$ 4,575	$ 4,575	0.05	0.05	0.05
2	Service Mtce	4,230	1.50%	1	$ 145.59	$ 9,238	$ 9,238	$ 9,238	$ 9,238	0.09	0.09	0.09
3	CP Field	3,123	1.50%	1	$ 145.59	$ 6,820	$ 6,820	$ 6,820	$ 6,820	0.06	0.06	0.06
4	L&M (Depth Checks)	994	1.50%	1	$ 146.59	$ 2,186	$ 2,186	$ 2,186	$ 2,186	0.02	0.02	0.02

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
5	Main Mtce	2,095	1.50%	$ 1,720	$ 54,051	$ 54,051	$ 54,051	$ 54,051
6	Service Mtce	4,230	1.50%	$ 1,720	$ 109,134	$ 109,134	$ 109,134	$ 109,134
7	CP Field	3,123	1.50%	$ 1,720	$ 80,573	$ 80,573	$ 80,573	$ 80,573
8	L&M (Depth Checks)	994	1.50%	$ 1,720	$ 25,645	$ 25,645	$ 25,645	$ 25,645

Engineered Traffic Control Plan

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime FPA Rate	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
9	Main Mtce	2,128	7.00%	1	$ 59.94	$ 8,929	$ 8,929	$ 8,929	$ 8,929	0.09	0.09	0.09
10	Service Mtce	4,230	7.00%	1	$ 59.94	$ 17,748	$ 17,748	$ 17,748	$ 17,748	0.17	0.17	0.17
11	CP Field	3,123	7.00%	1	$ 59.94	$ 13,103	$ 13,103	$ 13,103	$ 13,103	0.11	0.11	0.11
12	L&M (Depth Checks)	994	7.00%	1	$ 59.94	$ 4,171	$ 4,171	$ 4,171	$ 4,171	0.04	0.04	0.04

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Engineered Traffic Control Plan (cont'd)

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
13	**Main Mtce**	2,128	7.00%	$ 250	$ 37,240	**$ 37,240**	**$ 37,240**	**$ 37,240**
14	**Service Mtce**	4,230	7.00%	$ 250	$ 74,025	**$ 74,025**	**$ 74,025**	**$ 74,025**
15	**CP Field**	3,123	7.00%	$ 250	$ 54,653	**$ 54,653**	**$ 54,653**	**$ 54,653**
16	**L&M (Depth Checks)**	994	7.00%	$ 250	$ 17,395	**$ 17,395**	**$ 17,395**	**$ 17,395**

Limits on Construction Hours

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (2 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
17	**Main Mtce**	2,095	3.00%	1	$ 100.71	$ 6,330	**$ 6,330**	**$ 6,330**	**$ 6,330**	0.1	0.1	0.1
18	**Service Mtce**	4,733	3.00%	1	$ 100.71	$ 14,300	**$ 14,300**	**$ 14,300**	**$ 14,300**	0.1	0.1	0.1
19	**CP Field**	3,123	3.00%	1	$ 100.71	$ 9,436	**$ 9,436**	**$ 9,436**	**$ 9,436**	0.1	0.1	0.1
20	**L&M (Depth Checks)**	994	3.00%	1	$ 100.71	$ 3,003	**$ 3,003**	**$ 3,003**	**$ 3,003**	0.03	0.03	0.03
21	**M&R - Med MSA**	21,095	17%	0.25	$ 48.26	$ 41,998	**$ 41,998**	**$ 41,998**	**$ 41,998**	0.4	0.4	0.4
22	**M&R - Lrg MSA**	17,393	16%	0.25	$ 111.66	$ 77,401	**$ 77,401**	**$ 77,401**	**$ 77,401**	0.8	0.8	0.8
23	**M&R-Distr Reg Sta**	1,534	50.00%	0.5	$ 111.66	$ 42,822	**$ 42,822**	**$ 42,822**	**$ 42,822**	0.4	0.4	0.4

Note: M&R Med MSA is single person

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
24	**Main Mtce**	2,095	3.00%	$ 550	$ 34,568	**$ 34,568**	**$ 34,568**	**$ 34,568**
25	**Service Mtce**	4,733	3.00%	$ 550	$ 78,095	**$ 78,095**	**$ 78,095**	**$ 78,095**
26	**CP Field**	3,123	3.00%	$ 550	$ 51,530	**$ 51,530**	**$ 51,530**	**$ 51,530**
27	**L&M (Depth Checks)**	994	3.00%	$ 550	$ 16,401	**$ 16,401**	**$ 16,401**	**$ 16,401**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Note: The assumptions for Increased Permit Fees and Construction Requirements and for Increased Paving Requirements are different from the assumptions above.

Non Labor Assumptions: [A]: Projected orders based on 2005-2009 average number of completed units of work. Using an average factors in the fluctuations in the completed work units over time.
[B]: Field evaluation/estimate of the impacts on the total number of units.
[C, D, E]: Due to steadily increasing permit fees and paving requirements, the estimated increase per order is based on average annual costs from 2005-2009 trended to TY2012.

Increased Permit Fees and Construction Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
28	**Main Mtce**	2,811	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 108,533**	**$ 155,842**	**$205,934**
29	**Service Mtce**	5,417	37.00%	$ 39.00	$ 56.00	$ 74.00	**$ 78,174**	**$ 112,250**	**$148,330**
30	**CP Field**	3,123	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 120,579**	**$ 173,139**	**$228,791**
31	**L&M (Depth Checks)**	994	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 38,378**	**$ 55,107**	**$ 72,820**

Increased Paving Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
32	**Main Mtce**	2,811	94.00%	$ 35.00	$ 73.00	$ 112.00	**$ 92,482**	**$ 192,891**	**$295,942**
33	**Service Mtce**	5,417	37.00%	$ 35.00	$ 73.00	$ 112.00	**$ 70,156**	**$ 146,326**	**$224,500**
34	**CP Field**	3,123	80.00%	$ 35.00	$ 73.00	$ 112.00	**$ 87,444**	**$ 182,383**	**$279,821**
35	**L&M (Depth Checks)**	994	50.00%	$ 35.00	$ 73.00	$ 112.00	**$ 17,395**	**$ 36,281**	**$ 55,664**

Beginning of Workpaper
2GD000.003 - Pipeline O&M-Main Maintenance

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub 5. Main Maintenance
Workpaper: 2GD000.003 - Pipeline O&M-Main Maintenance

Activity Description:

Recorded to the main maintenance work group are labor and non labor expenses for the repair of leaks and leak evaluations; compliance maintenance work such as clearing rights of ways of brush and debris, patrolling high pressure supply lines; main damage repair; and main alterations.

Forecast Methodology:

Labor - 5-YR Average

A five year average is the most appropriate methodology to use in forecasting the TY2012 labor and non labor requirements for this work group. Using a five year average captures fluctuations year over year due to high and low maintenance and repairs required due to the current condition of the infrastructure. To the five year average foundation, incremental costs are forecasted as the result of (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; and (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites..

Non-Labor - 5-YR Average

A five year average is the most appropriate methodology to use in forecasting the TY2012 labor and non labor requirements for this work group. Using a five year average captures fluctuations year over year due to high and low maintenance and repairs required due to the current condition of the infrastructure. To the five year average foundation, incremental costs are forecasted as the result of (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

NSE - 5-YR Average

NSE is not applicable to this work group.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	6,110	5,202	4,594	4,492	4,887	5,163	5,211	5,332
Non-Labor	1,776	1,599	1,585	1,267	1,800	1,944	2,193	2,599
NSE	0	0	0	0	0	0	0	0
Total	7,886	6,801	6,179	5,759	6,687	7,107	7,404	7,931
FTE	85.1	72.8	61.5	59.9	64.3	69.7	70.2	71.7

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 5. Main Maintenance
Workpaper: 2GD000.003 - Pipeline O&M-Main Maintenance

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	5-YR Average	5,057	5,057	5,057	106	154	275	5,163	5,211	5,332
Non-Labor	5-YR Average	1,605	1,605	1,605	339	588	994	1,944	2,193	2,599
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
Total		6,662	6,662	6,662	445	742	1,269	7,107	7,404	7,931
FTE	5-YR Average	68.7	68.7	68.7	1.0	1.5	3.0	69.7	70.2	71.7

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010	106	0	0	106	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

2010	0	0	0	0	1.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

2010	0	339	0	339	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

2010 Total	**106**	**339**	**0**	**445**	**1.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 5. Main Maintenance
Workpaper: 2GD000.003 - Pipeline O&M-Main Maintenance

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
2011	154	0	0	154	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

2011	0	588	0	588	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

2011	0	0	0	0	1.5	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

2011 Total	**154**	**588**	**0**	**742**	**1.5**	

2012	275	0	0	275	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

2012	0	994	0	994	0.0	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 5. Main Maintenance
Workpaper: 2GD000.003 - Pipeline O&M-Main Maintenance

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.						
2012	0	0	0	0	3.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.						
2012 Total	**275**	**994**	**0**	**1,269**	**3.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 5. Main Maintenance
Workpaper: 2GD000.003 - Pipeline O&M-Main Maintenance

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	4,124	3,789	3,691	3,654	4,078
Non-Labor	2,121	2,660	2,516	2,292	2,235
NSE	0	0	0	0	0
Total	6,245	6,449	6,207	5,946	6,312
FTE	64.0	57.1	52.0	50.0	54.1
Adjustments (Nominal $) **					
Labor	539	267	0	19	61
Non-Labor	-539	-1,184	-1,004	-1,022	-435
NSE	0	0	0	0	0
Total	-1	-917	-1,004	-1,003	-373
FTE	8.1	4.4	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	4,663	4,056	3,691	3,673	4,139
Non-Labor	1,582	1,476	1,512	1,270	1,800
NSE	0	0	0	0	0
Total	6,244	5,532	5,203	4,944	5,939
FTE	72.1	61.5	52.0	50.0	54.1
Vacation & Sick (Nominal $)					
Labor	795	725	644	708	748
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	795	725	644	708	748
FTE	13.0	11.3	9.5	9.9	10.2
Escalation to 2009$					
Labor	652	421	259	111	0
Non-Labor	194	123	73	-3	0
NSE	0	0	0	0	0
Total	846	544	332	108	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	6,110	5,202	4,594	4,492	4,887
Non-Labor	1,776	1,599	1,585	1,267	1,800
NSE	0	0	0	0	0
Total	7,885	6,801	6,179	5,759	6,687
FTE	85.1	72.8	61.5	59.9	64.3

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 5. Main Maintenance
Workpaper: 2GD000.003 - Pipeline O&M-Main Maintenance

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	539	267	0	19	61
Non-Labor	-539	-1,184	-1,004	-1,022	-435
NSE	0	0	0	0	0
Total	-0.692	-917	-1,004	-1,003	-373
FTE	8.1	4.4	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005	0	-49	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1131858507

Adjustment (reduction) of Cathodic Protection non labor expense. Corresponding adjustment (increase) can be found in 2GD000.006 Cathodic Protection work group.

2005	-24	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 8143940987

Adjustment necessary to appropriately reflect special leakage survey work in the Leak Survey work group. Corresponding adjustment increase in said work group.

2005	562	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3142845363

Adjustment for main damage labor that was incorrectly mapped to Service Mtce work group 2GD000.004. Corresponding adjustment (decrease) in said work group.

2005	0	0	0	8.1	1-Sided Adj	N/A	TP1MTC2009090 3143141460

FTE adjustment related to main damage labor that was incorrectly mapped to service maintenance work group 2GD000.004. Corresponding adjustment in said work group.

2005	0	125	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3143519293

Adjustment (increase) due to non labor main damage expense being incorrectly mapped to Service Maintenance work group 2GD000.004. Corresponding adjustment (decrease) in said work group.

2005	0	-615	0	0.0	1-Sided Adj	N/A	TP1MTC2010012 8141344657

One sided adjustment for credits for cash collected for main damages which were originally shown in cost center 2200-2092. This adjustment will allow for the credits to be combined with the main damage expenditures in the correct work group. Corresponding one-sided adjustment in cost center 2200-2092.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 5. Main Maintenance
Workpaper: 2GD000.003 - Pipeline O&M-Main Maintenance

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005 Total	**539**	**-539**	**0**	**8.1**			
2006	0	-53	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1132753863
Adjustment (reduction) of Cathodic Protection non labor expense which should be appropriately reflected in Cathodic Protection work group. Thus a corresponding adjustment (increase) can be found in 2GD000.006 Cathodic Protection work group.							
2006	267	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3144926487
Adjustment (increase) related to main damage labor incorrectly mapped to Service Maintenance work group 2GD000.004. Corresponding adjustment (decrease) in said work group.							
2006	0	0	0	4.4	1-Sided Adj	N/A	TP1MTC2009090 3145038490
Adjustment (increase) in FTEs related to main damage labor which was incorrectly mapped to Service Maintenance work group. Corresponding adjustment (decrease) in said work group.							
2006	0	107	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3145211257
Adjustment (increase) related to main damage non labor which was incorrectly mapped to Service Maintenance work group 2GD000.004. Corresponding adjustment (decrease) in said work group.							
2006	0	-1,238	0	0.0	1-Sided Adj	N/A	TP1MTC2010012 8141654740
One sided adjustment for credits for cash collected for main damages which were originally shown in cost center 2200-2092. This adjustment will allow for the credits to be combined with the main damage expenditures in the correct work group. Corresponding one-sided adjustment in cost center 2200-2092.							
2006 Total	**267**	**-1,184**	**0**	**4.4**			
2007	0	-54	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1133031930
Adjustment (reduction) of Cathodic Protection non labor expense which should be appropriately reflected in Cathodic Protection work group. Thus a corresponding adjustment (increase) can be found in 2GD000.006 Cathodic Protection work group.							
2007	0	-950	0	0.0	1-Sided Adj	N/A	TP1MTC2010012 8141841537
One sided adjustment for credits for cash collected for main damages which were originally shown in cost center 2200-2092. This adjustment will allow for the credits to be combined with the main damage expenditures in the correct work group. Corresponding one-sided adjustment in cost center 2200-2092.							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 5. Main Maintenance
Workpaper: 2GD000.003 - Pipeline O&M-Main Maintenance

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2007 Total	**0**	**-1,004**	**0**	**0.0**			
2008	0	-72	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1133140997
Adjustment (reduction) of Cathodic Protection non labor expense which should be appropriately reflected in Cathodic Protection work group. Thus a corresponding adjustment (increase) can be found in 2GD000.006 Cathodic Protection work group.							
2008	19	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1150142307
Adjustment (increase) to reflect Mains labor expense which should be appropriately reflected in Mains work group 2GD000.003. Corresponding adjustment (decrease) can be found in 2GD000.000 work group.							
2008	0	-949	0	0.0	1-Sided Adj	N/A	TP1MTC2010012 8142049277
One sided adjustment for credits for cash collected for main damages which were originally shown in cost center 2200-2092. This adjustment will allow for the credits to be combined with the main damage expenditures in the correct work group. Corresponding one-sided adjustment in cost center 2200-2092.							
2008 Total	**19**	**-1,022**	**0**	**0.0**			
2009	0	-386	0	0.0	1-Sided Adj	N/A	TP1MTC2010012 8143122117
One sided adjustment for credits for cash collected for main damages which were originally shown in cost center 2200-2092. This adjustment will allow for the credits to be combined with the main damage expenditures in the correct work group. Corresponding one-sided adjustment in cost center 2200-2092.							
2009	0	-49	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 3144732103
Adjustment needed to appropriately reflect Cathodic Protection Non Labor which was originally shown in Main Mtce workgroup. A corresponding adjustment can be found in 2GD000.006 Cathodic Protection work group.							
2009	61	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3085242813
Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.							
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3111909530
Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 5. Main Maintenance
Workpaper: 2GD000.003 - Pipeline O&M-Main Maintenance

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3112020003
Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.							
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3113045633
Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.							
2009 Total	**61**	**-435**	**0**	**0.0**			

Supplemental Workpapers for Workpaper 2GD000.003

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Increased City/Municipality Requirements

The construction, operation and maintenance of SCG's vast pipeline system require interaction and compliance with numerous local, state, and federal legislative and regulatory agencies. These agencies continue to impose new and often more stringent administrative planning and field construction operating conditions that can result in increased cost pressures to maintain the gas distribution system. These recent changes in municipality requirements that have led to cost increases for SCG due to mandated night work, engineered traffic control plans, limits on construction hours, increased construction permit costs and increased paving requirements. The calculation of these incremental costs are shown below.

Workgroups affected:

> **Main Maintenance**
> **Service Maintenance**
> **Cathodic Protection**
> **Locate and Mark (Depth Checks)**
> **Measurement & Regulation (M&R): Limits on construction hours only**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated work duration x overtime crew rates

Non-Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated non labor expenses

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units over time.

[B]: Estimated percent of total work units that will be impacted is based on assessment by the operating districts currently experiencing the restrictions.

[C]: Estimated additional hours required to comply with the City/Municipality restrictions. The calculation for durations of work were based on responses by the operating districts currently experiencing the restrictions.

[E] FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

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Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Non Labor Assumptions: [A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units.
[B]: Based upon field assessment of the impacts on the total number of orders.
[C]: Non labor costs are made up of:
Estimated 3rd party contractor labor (provided by operating district personnel)
Historical average costs for 3rd party rentals (night lights, steel plates, etc.)

Night work

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (3 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
1	Main Mtce	2,095	1.50%	1	$ 145.59	$ 4,575	$ 4,575	$ 4,575	$ 4,575	0.05	0.05	0.05
2	Service Mtce	4,230	1.50%	1	$ 145.59	$ 9,238	$ 9,238	$ 9,238	$ 9,238	0.09	0.09	0.09
3	CP Field	3,123	1.50%	1	$ 145.59	$ 6,820	$ 6,820	$ 6,820	$ 6,820	0.06	0.06	0.06
4	L&M (Depth Checks)	994	1.50%	1	$ 146.59	$ 2,186	$ 2,186	$ 2,186	$ 2,186	0.02	0.02	0.02

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
5	Main Mtce	2,095	1.50%	$ 1,720	$ 54,051	$ 54,051	$ 54,051	$ 54,051
6	Service Mtce	4,230	1.50%	$ 1,720	$ 109,134	$ 109,134	$ 109,134	$ 109,134
7	CP Field	3,123	1.50%	$ 1,720	$ 80,573	$ 80,573	$ 80,573	$ 80,573
8	L&M (Depth Checks)	994	1.50%	$ 1,720	$ 25,645	$ 25,645	$ 25,645	$ 25,645

Engineered Traffic Control Plan

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime FPA Rate	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
9	Main Mtce	2,128	7.00%	1	$ 59.94	$ 8,929	$ 8,929	$ 8,929	$ 8,929	0.09	0.09	0.09
10	Service Mtce	4,230	7.00%	1	$ 59.94	$ 17,748	$ 17,748	$ 17,748	$ 17,748	0.17	0.17	0.17
11	CP Field	3,123	7.00%	1	$ 59.94	$ 13,103	$ 13,103	$ 13,103	$ 13,103	0.11	0.11	0.11
12	L&M (Depth Checks)	994	7.00%	1	$ 59.94	$ 4,171	$ 4,171	$ 4,171	$ 4,171	0.04	0.04	0.04

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Engineered Traffic Control Plan (cont'd)

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
13	**Main Mtce**	2,128	7.00%	$ 250	$ 37,240	**$ 37,240**	**$ 37,240**	**$ 37,240**
14	**Service Mtce**	4,230	7.00%	$ 250	$ 74,025	**$ 74,025**	**$ 74,025**	**$ 74,025**
15	**CP Field**	3,123	7.00%	$ 250	$ 54,653	**$ 54,653**	**$ 54,653**	**$ 54,653**
16	**L&M (Depth Checks)**	994	7.00%	$ 250	$ 17,395	**$ 17,395**	**$ 17,395**	**$ 17,395**

Limits on Construction Hours

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (2 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
17	**Main Mtce**	2,095	3.00%	1	$ 100.71	$ 6,330	**$ 6,330**	**$ 6,330**	**$ 6,330**	0.1	0.1	0.1
18	**Service Mtce**	4,733	3.00%	1	$ 100.71	$ 14,300	**$ 14,300**	**$ 14,300**	**$ 14,300**	0.1	0.1	0.1
19	**CP Field**	3,123	3.00%	1	$ 100.71	$ 9,436	**$ 9,436**	**$ 9,436**	**$ 9,436**	0.1	0.1	0.1
20	**L&M (Depth Checks)**	994	3.00%	1	$ 100.71	$ 3,003	**$ 3,003**	**$ 3,003**	**$ 3,003**	0.03	0.03	0.03
21	**M&R - Med MSA**	21,095	17%	0.25	$ 48.26	$ 41,998	**$ 41,998**	**$ 41,998**	**$ 41,998**	0.4	0.4	0.4
22	**M&R - Lrg MSA**	17,393	16%	0.25	$ 111.66	$ 77,401	**$ 77,401**	**$ 77,401**	**$ 77,401**	0.8	0.8	0.8
23	**M&R-Distr Reg Sta**	1,534	50.00%	0.5	$ 111.66	$ 42,822	**$ 42,822**	**$ 42,822**	**$ 42,822**	0.4	0.4	0.4

Note: M&R Med MSA is single person

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
24	**Main Mtce**	2,095	3.00%	$ 550	$ 34,568	**$ 34,568**	**$ 34,568**	**$ 34,568**
25	**Service Mtce**	4,733	3.00%	$ 550	$ 78,095	**$ 78,095**	**$ 78,095**	**$ 78,095**
26	**CP Field**	3,123	3.00%	$ 550	$ 51,530	**$ 51,530**	**$ 51,530**	**$ 51,530**
27	**L&M (Depth Checks)**	994	3.00%	$ 550	$ 16,401	**$ 16,401**	**$ 16,401**	**$ 16,401**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Note: The assumptions for Increased Permit Fees and Construction Requirements and for Increased Paving Requirements are different from the assumptions above.

Non Labor Assumptions: [A]: Projected orders based on 2005-2009 average number of completed units of work. Using an average factors in the fluctuations in the completed work units over time.
[B]: Field evaluation/estimate of the impacts on the total number of units.
[C, D, E]: Due to steadily increasing permit fees and paving requirements, the estimated increase per order is based on average annual costs from 2005-2009 trended to TY2012.

Increased Permit Fees and Construction Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
28	**Main Mtce**	2,811	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 108,533**	**$ 155,842**	**$205,934**
29	**Service Mtce**	5,417	37.00%	$ 39.00	$ 56.00	$ 74.00	**$ 78,174**	**$ 112,250**	**$148,330**
30	**CP Field**	3,123	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 120,579**	**$ 173,139**	**$228,791**
31	**L&M (Depth Checks)**	994	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 38,378**	**$ 55,107**	**$ 72,820**

Increased Paving Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
32	**Main Mtce**	2,811	94.00%	$ 35.00	$ 73.00	$ 112.00	**$ 92,482**	**$ 192,891**	**$295,942**
33	**Service Mtce**	5,417	37.00%	$ 35.00	$ 73.00	$ 112.00	**$ 70,156**	**$ 146,326**	**$224,500**
34	**CP Field**	3,123	80.00%	$ 35.00	$ 73.00	$ 112.00	**$ 87,444**	**$ 182,383**	**$279,821**
35	**L&M (Depth Checks)**	994	50.00%	$ 35.00	$ 73.00	$ 112.00	**$ 17,395**	**$ 36,281**	**$ 55,664**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Pedestrian Access at Construction Sites
During hearings on SCG's TY2008 GRC, SCG entered into an agreement with the Disability Rights Advocates (DiRA) to modify SCG's field practices providing for safe pedestrian access around construction sites for disabled individuals. Since that agreement was signed SCG, working with DiRA, has identified materials and procedural changes that address DiRA's concerns. To effectively integrate these changes into daily operations required the purchase of specialized barricades and ramps to be used at the construction site, additional field training on proper use and placement of these devices, and incremental preparation including set up and tear down time at the job site. The calculation of these incremental costs are shown below.

Training Costs: **Includes the inital training for employees to learn how to appropriately construct and dismantle the percautionary devices (ramps and baricades) plus the annual review of this procedure. Initial instruction and annual review will be done at the base location and scheduled by local management. All impacted field employees will be expected to have recieved this training and review.**

Workgroups affected: **Pipeline O&M Field Support**

Methodology: Training for platform contruction and dismantling is calculated as follows:
Count of impacted field employees x average combined rate of impacted employees (based on Labor Agreement schedule) x training duration.

Assumptions:

[A]: Based on impacted classifications, 620 employees have been identified as requiring knowledge to construct and dismantle materials.

[B]: Overtime weighted average labor rate of impacted employees.

[C]: Time required to either complete the intial instruction sessions or the annual review requirements.

[E]: 50% of employee base is anticipated to receive initial training during 2010. The remaining 50% will receive instruction during 2011. Annual review will begin in 2011 and continue into 2012 will all employees in 2012 (and forward) receiving annual review.

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

Line #		[A] Impacted Employee Count	[B] Avg. Overtime Pay Rate	[C] Training Duration (Hrs)	[A x B x C]=[D] Total per Year	[E] 2010	[E] 2011	[E] 2012	[F] 2010 FTE	[F] 2011 FTE	[F] 2012 FTE
1	Initial Instruction	620	$ 50.77	2	$ 62,950	$ 31,475	$ 31,475	$ -	0.5	0.5	0
2	Annual Review	620	$ 50.77	0.5	$ 15,737	$ -	$ 7,869	$ 7,869	0	0.04	0.04
					Total Requirement	**$ 31,475**	**$ 39,343**	**$ 7,869**	0.5	0.54	0.04

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Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Set up and Dismantling Costs

Workgroups affected:

- **Main Maintenance**
- **Service Maintenance**
- **Cathodic Protection**
- **Measurement & Regulation**

Methodology: The average hourly rate was Incremental time for platform contruction and dismantling is calculated as follows: Total Orders x Estimated percent of total orders requiring DiRA application x Estimated hours to set-up and dismantle equipment x Overtime Crew Rate (2 person)

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders

[B]: Estimated percent of total orders that will require the additional pedestrian access barricades. Based on local field managements assessment of the impact

[C]: Estimated hours to set up related equipment for these orders is 3.5 hrs. This figure was determined by the time it took the manufacturer to set up the equipment during a demonstration (1.75 hours set up only). Since field conditions are less complex for M&R work, the configuration requirements are signficantly less; therefore, M&R work was estimated to take half the time to set up and dismantle (1.75 hrs).

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[D]	[AxBxCxD]=[E]				[F]	[F]	[F]
Line #	Work Group	Total Orders per Year	Percent Requiring Set-up	Work Duration (Hrs)	Overtime Crew Rate (2 person)	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
3	**Main Maintenance**	2,095	4.41%	3.5	$ 100.71	$ 32,566	**$ 32,566**	**$ 32,566**	**$ 32,566**	0.3	0.3	0.3
4	**Service Maintenance**	7,653	6.80%	3.5	$ 100.71	$ 183,430	**$ 183,430**	**$ 183,430**	**$183,430**	1.8	1.8	1.8
5	**Cathodic Protection**	3,123	7.90%	3.5	$ 100.71	$ 86,964	**$ 86,964**	**$ 86,964**	**$ 86,964**	0.8	0.8	0.8
6	**M&R-Dist. Reg. Station**	1,989	46.00%	1.75	$ 111.66	$ 178,784	**$ 178,784**	**$ 178,784**	**$178,784**	1.4	1.4	1.4

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Los Osos City Sewer System

Los Osos City Sewer System
The City of Los Osos in San Luis Obispo County is installing a sewer piping system to replace the existing septic tank systems. This project will encompass the entire city and begins in 2011 continuing through 2013. Additional work by SCG will be required to identify and avoid conflicts with the sewer pipe installation. The calculation of these incremental costs are shown below.

Workgroups affected:

- **Locate and Mark**
  - Depth Checks
  - Locating and Marking
  - Job Observations
- **Main Maintenance**
- **Service Maintenance**

Methodology:

Costs for performing Depth Checks, Main Alterations and Service Alterations is calculated as follows:

Labor
Total estimated orders x 2005-2009 average hours per order x overtime labor rate of impacted employees.

Non-Labor
Total estimated orders x 2005-2009 average annual cost per unit

Labor Assumptions:

[A]: Estimated number of units were derived by field assessment of the impact that the proposed sewer line will have on SCG's existing infrastructure. The Sewer line installation will force SCG to locate, mark and identify the depth of its pipelines. Mains and Services that are in conflict with the proposed sewer line location will need to be altered. Additionally continuous observation will be required where our high priority lines are within 10' of the proposed sewer.

[B]: Estimated hours per order based upon field assesment of the work.
[C]: Overtime rate for impacted employees
[E]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

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Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Los Osos City Sewer System

Line #	Labor	[A] Estimated Total Units	[B] Hours per Order	[C] Overtime Rate	[A x B x C]=[D] Total Project Cost	2010	2011 (20%)	2012 (70%)	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
1	L&M (Depth Checks)	98	12	$ 100.71	$ 120,156	$ -	$ 24,031	$ 84,109	0	0.2	0.8
2	Locating and Marking	5,763	0.21	$ 48.26	$ 59,304	$ -	$ 11,861	$ 41,513	0	0.1	0.4
3	Job Observations	319	4.00	$ 48.26	$ 61,573	$ -	$ 12,315	$ 43,101	0	0.1	0.4
4	Main Alterations	75	32	$ 100.71	$ 241,704	$ -	$ 48,341	$169,193	0	0.5	1.6
5	Service Alterations	513	6	$ 100.71	$ 307,509	$ -	$ 61,502	$215,256	0	0.6	2.1

Non-Labor Assumptions:

[A]: Estimated number of units were derived by field assessment of the impact that the proposed sewer line will have on SCG's existing infrastructure. The Sewer line installation will force SCG to locate, mark and identify the depth of its pipelines. Mains and Services that are in conflict with the proposed sewer line location will need to be altered. Additionally continuous observation will be required where our high priority lines are within 10' of the proposed sewer.

[B]: 2005-2009 average non-labor cost per unit

Line #	Non Labor	[A] Estimated Total Units	[B] Avg Annual Non Labor Cost Per Unit	[A x B] Total per Year	2010	2011 (20%)	2012 (70%)
6	L&M (Depth Checks)	98	$ 171.00	$ 16,758	$ -	$ 3,352	$ 11,731
7	Locate and Mark	0	$ -	$ -	$ -	$ -	$ -
8	Job Observations	0	$ -	$ -	$ -	$ -	$ -
9	Main Alterations	75	$ 6,742	$ 505,667	$ -	$101,133	$353,967
10	Service Alterations	513	$ 103	$ 52,734	$ -	$ 10,547	$ 36,914

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding

Federal Stimulus Funding
The American Recovery and Reinvestment Act of 2009 provided funding to local and state agencies to construct mobility projects that bring value to the local, state and federal economy. This Act apportioned funds to California for highways, local streets and roads, freight and passenger rail, port infrastructure, and transit projects. As Stimulus Funding projects are constructed in local streets and highways, SCG anticipates that this work will result in a greater number of work orders. The calculation of these incremental costs are shown below.

Workgroups affected:

> **Locate and Mark (Depth Checks)**
> **Main Maintenance**
> **Service Maintenance**
> **Cathodic Protection**

Methodology:

The cost for additional labor and non labor in workgroups Locate & Mark, Main Maintenance and Service Maintenance was calculated as follows:

Labor
Total estimated work units x 2005-2009 average hours per unit x overtime labor rate of impacted employees.

Non-Labor
Total estimated work units x 2005-2009 average annual non labor cost per unit.

Note: Work units are either work orders or miles of Main

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding

Assumptions:

[A]: Estimated number of units were derived based on stimulus work data received from survey of field managers. The results reflect responses from District managers who have, or expect to have, Federal Stimulus projects in their area.

[B]: 2005-2009 average hours per unit.

[C]: Overtime rate of impacted employees

[E]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[AxBxC]=[D]				[E]	[E]	[E]
Line #	Labor	Estimated Annual Units	Hours per Unit	Overtime Rate	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	**L&M (Depth Checks)**	60	12	$100.71	$72,511	**$72,511**	**$72,511**	**$72,511**	0.7	0.7	0.7
2	**Main Maintenance**	17	31	$100.71	$53,524	**$53,524**	**$53,524**	**$53,524**	0.5	0.5	0.5
3	**Service Maintenance**	43	9	$100.71	$39,528	**$39,528**	**$39,528**	**$39,528**	0.4	0.4	0.4
4	**Cathodic Protection**	193	1.28	$ 48.26	$11,962	**$11,962**	**$11,962**	**$11,962**	0.2	0.2	0.2

Assumptions:

[A]: Estimated number of units were derived based on stimulus work data received from survey of field managers. The results reflect responses from District managers who have, or expect to have, Federal Stimulus projects in their area.

[B]: 2005-2009 average non labor cost per unit.

		[A]	[B]	[A x B]			
Line #	Non Labor	Estimated Annual Units	Avg Annual Non Labor Cost Per Unit	Total per Year	2010	2011	2012
5	**L&M (Depth Checks)**	60	$ 171.00	$10,260	**$10,260**	**$10,260**	**$10,260**
6	**Main Maintenance**	17	$ 710.63	$12,081	**$12,081**	**$12,081**	**$12,081**
7	**Service Maintenance**	43	$ 172.08	$ 7,399	**$ 7,399**	**$ 7,399**	**$ 7,399**
8	**Cathodic Protection**	193	$ 107.58	$20,762	**$20,762**	**$20,762**	**$20,762**

Beginning of Workpaper
2GD000.004 - Pipeline O&M-Service Maintenance

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub 6. Service Maintenance
Workpaper: 2GD000.004 - Pipeline O&M-Service Maintenance

Activity Description:

Recorded to the service maintenance work group are labor and non labor expenses for the repair of service leaks and riser repairs; maintenance on the meter set assembly; and other service work, such as repair of damages and customer requested alterations.

Forecast Methodology:

Labor - 5-YR Average

A five year average is the most appropriate methodology to use in forecasting the TY2012 labor and non labor requirements for this work group. Using a five year average captures fluctuations year over year due to high and low maintenance and repairs required due to the current condition of the infrastructure. To the five year average foundation, incremental costs are forecasted as the result of: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; and (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

Non-Labor - 5-YR Average

A five year average is the most appropriate methodology to use in forecasting the TY2012 labor and non labor requirements for this work group. Using a five year average captures fluctuations year over year due to high and low maintenance and repairs required due to the current condition of the infrastructure. To the five year average foundation, incremental costs are forecasted as the result of: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

NSE - 5-YR Average

NSE is not applicable to this work group.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	10,356	10,306	9,807	9,515	9,978	10,256	10,477	10,630
Non-Labor	444	-885	-980	-924	183	-15	106	246
NSE	0	0	0	0	0	0	0	0
Total	10,800	9,421	8,827	8,591	10,161	10,241	10,583	10,876
FTE	137.0	136.1	126.2	124.3	128.7	133.0	135.3	136.7

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 6. Service Maintenance
Workpaper: 2GD000.004 - Pipeline O&M-Service Maintenance

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	5-YR Average	9,992	9,992	9,992	264	485	638	10,256	10,477	10,630
Non-Labor	5-YR Average	-432	-432	-432	417	538	678	-15	106	246
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
Total		9,560	9,560	9,560	681	1,023	1,316	10,241	10,583	10,876
FTE	5-YR Average	130.5	130.5	130.5	2.5	4.8	6.2	133.0	135.3	136.7

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010	264	0	0	264	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; and (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

2010	0	0	0	0	2.5	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites.

2010	0	417	0	417	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

2010 Total	**264**	**417**	**0**	**681**	**2.5**

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 6. Service Maintenance
Workpaper: 2GD000.004 - Pipeline O&M-Service Maintenance

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
2011	485	0	0	485	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; and (5) increased costs to address an aging infrastructure.

2011	0	538	0	538	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.

2011	0	0	0	0	4.8	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; and (5) increased costs to address an aging infrastructure.

2011 Total	**485**	**538**	**0**	**1,023**	**4.8**	

2012	638	0	0	638	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; and (5) increased costs to address an aging infrastructure.

2012	0	678	0	678	0.0	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
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Workpaper: 2GD000.004 - Pipeline O&M-Service Maintenance

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; and (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities.						
2012	0	0	0	0	6.2	1-Sided Adj
A: Incremental funding required in the following areas: (1) Los Osos City sewer project; (2) increased city/municipality requirements related to permitting and paving costs and requirements, engineered traffic control plans, and restricted working hours; (3) increased work as a result of Federal Stimulus funding provided to cities, counties and municipalities; (4) additional time on the job per the agreement between SCG and the Disability Rights Advocates which requires SCG to provide safe pedestrian access to disabled individuals around SCG construction sites; and (5) increased costs to address an aging infrastructure.						
2012 Total	**638**	**678**	**0**	**1,316**	**6.2**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 6. Service Maintenance
Workpaper: 2GD000.004 - Pipeline O&M-Service Maintenance

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	7,279	6,962	6,824	7,781	8,326
Non-Labor	437	559	655	779	1,514
NSE	0	0	0	0	0
Total	7,715	7,521	7,479	8,560	9,840
FTE	105.1	98.3	91.2	103.8	108.2
Adjustments (Nominal $) **					
Labor	625	1,074	1,055	0	125
Non-Labor	-41	-1,375	-1,589	-1,705	-1,331
NSE	0	0	0	0	0
Total	583	-302	-534	-1,705	-1,206
FTE	11.0	16.7	15.6	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	7,903	8,036	7,879	7,781	8,451
Non-Labor	395	-817	-935	-926	183
NSE	0	0	0	0	0
Total	8,299	7,219	6,945	6,855	8,634
FTE	116.1	115.0	106.8	103.8	108.2
Vacation & Sick (Nominal $)					
Labor	1,348	1,436	1,375	1,499	1,527
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	1,348	1,436	1,375	1,499	1,527
FTE	20.9	21.1	19.4	20.5	20.5
Escalation to 2009$					
Labor	1,105	835	553	235	0
Non-Labor	49	-68	-45	2	0
NSE	0	0	0	0	0
Total	1,154	767	508	237	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	10,356	10,306	9,807	9,515	9,978
Non-Labor	444	-885	-980	-924	183
NSE	0	0	0	0	0
Total	10,800	9,422	8,828	8,591	10,161
FTE	137.0	136.1	126.2	124.3	128.7

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
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Workpaper: 2GD000.004 - Pipeline O&M-Service Maintenance

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	625	1,074	1,055	0	125
Non-Labor	-41	-1,375	-1,589	-1,705	-1,331
NSE	0	0	0	0	0
Total	583	-302	-534	-1,705	-1,206
FTE	11.0	16.7	15.6	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005	-562	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3143853830
Adjustment (decrease) for main damage labor incorrectly charged to Service Maintenance work group. Corresponding adjustment (increase) in Main Maintenance work group 2GD000.003.							
2005	0	-125	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3144303087
Adjustment (decrease) related to main damage non labor that was incorrectly mapped to Service Maintenance work group 2GD000.004. Corresponding adjustment (increase) in Main Maintenance work group 2GD000.003.							
2005	0	0	0	-7.8	1-Sided Adj	N/A	TP1MTC2009110 5104256583
Adjustment (decrease) for main damage labor that was incorrectly mapped to Service Mtce work group 2GD000.004. Corresponding adjustment (increase) in Main Mtce work group 2GD000.003							
2005	0	84	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 4110857010
Adjustment for net amount of damage credits transferred from cost center 2200-2092. The transfer will combine damage labor and non labor expenses in the service maintenance work group. Corresponding adjustment in cost center 2200-2092.							
2005	1,187	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8104747053
Transfer of MSA maintenance expense from 2GD000.000 to Service Mtce work group to align years 2005-2007 with current charging of this activity.							
2005	0	0	0	18.8	1-Sided Adj	N/A	TP1MTC2010020 8104922473
Transfer of MSA maintenance expense from 2GD000.000 to Service Mtce work group to align years 2005-2007 with current charging of this activity.							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
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Workpaper: 2GD000.004 - Pipeline O&M-Service Maintenance

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005 Total	**625**	**-41**	**0**	**11.0**			
2006	-267	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3145323900
Adjustment (decrease) related to main damage non labor incorrectly mapped to Service Maintenance work group 2GD000.004. Corresponding adjustment (increase) in Main Maintenance work group 2GD000.003							
2006	0	-107	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3145628407
Adjustment (decrease) related to main damage non labor incorrectly mapped to Service Maintenance work group 2GD000.004. Corresponding adjustment (increase) in Main Damage work group 2GD000.003.							
2006	0	0	0	-4.4	1-Sided Adj	N/A	TP1MTC2009110 5104411067
Adjustment (decrease) for main damage labor that was incorrectly mapped to Service Mtce work group 2GD000.004. Corresponding adjustment (increase) in Main Mtce work group 2GD000.003.							
2006	0	-1,354	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 4111202267
Adjustment for damage credits for cash collected transferred from cost center 2200-2092. The transfer will combine damage labor and non labor expenses with the credits for cash collected in the service maintenance work group. Corresponding adjustment in cost center 2200-2092.							
2006	1,341	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8105801900
Transfer of MSA maintenance expense from 2GD000.000 to align years 2005-2007 with current charging of this activity.							
2006	0	86	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8105926353
Transfer of MSA maintenance expense from 2GD000.000 to Service Mtce work group to align years 2005-2007 with current charging of this activity.							
2006	0	0	0	21.1	1-Sided Adj	N/A	TP1MTC2010020 8110051150
Transfer of MSA maintenance expense from 2GD000.000 to Service Mtce work group to align years 2005-2007 with current charging of this activity.							
2006 Total	**1,074**	**-1,375**	**0**	**16.7**			

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 6. Service Maintenance
Workpaper: 2GD000.004 - Pipeline O&M-Service Maintenance

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2007	0	-1,652	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 4111609973

Adjustment for damage credits for cash collected transferred from cost center 2200-2092. The transfer will combine damage labor and non labor expenses with the credits for cash collected in the service maintenance work group. Corresponding adjustment in cost center 2200-2092.

2007	1,055	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8110728580

Transfer of MSA maintenance expense from 2GD000.000 to Service Mtce work group to align years 2005-2007 with current charging of this activity.

2007	0	62	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8110819580

Transfer of MSA maintenance expense from 2GD000.000 to Service Mtce work group to align years 2005-2007 with current charging of this activity.

2007	0	0	0	15.6	1-Sided Adj	N/A	TP1MTC2010020 8110946147

Transfer of MSA maintenance expense from 2GD000.000 to Service Mtce work group to align years 2005-2007 with current charging of this activity.

2007 Total	**1,055**	**-1,589**	**0**	**15.6**

2008	0	-1,705	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 4111843570

Adjustment for damage credits for cash collected transferred from cost center 2200-2092. The transfer will combine damage labor and non labor expenses with the credits for cash collected in the service maintenance work group. Corresponding adjustment in cost center 2200-2092.

2008 Total	**0**	**-1,705**	**0**	**0.0**

2009	0	-1,331	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 4112037070

Adjustment for damage credits for cash collected transferred from cost center 2200-2092. The transfer will combine damage labor and non labor expenses with the credits for cash collected in the service maintenance work group. Corresponding adjustment in cost center 2200-2092.

2009	125	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3085354767

Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 6. Service Maintenance
Workpaper: 2GD000.004 - Pipeline O&M-Service Maintenance

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2009 Total	**125**	**-1,331**	**0**	**0.0**			

Supplemental Workpapers for Workpaper 2GD000.004

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure

Aging Infrastructure - Obsolete Regulators

In 2010, the company identified regulators, excluding those without internal relief capabilities, which because of age, performance or obsolescence should be targeted for replacement. These regulator replacements will begin in 2011 and are in addition to other existing regulator changeout programs. To minimize the labor costs, the identification and regulator replacement work will be combined with other work requiring personnel to work on the MSA. For Pipeliine O&M the impacted work-types are MSA related orders: riser replacements, stopcock changes and small MSA rebuilds. Based on the criteria defining the obsolete regulators it is estimated that 34% of the MSA related orders will require a regulator changeout. The calculation of incremental costs to replace these additional regulators are shown below.

Workgroups affected: **Service Maintenance**

Methodology: **Costs for the incidental replacement of obsolete regulators is calculated as follows:**

Labor

Total Orders x Estimated percent of total orders requiring regulator replacement x Estimated hours to do the work x Overtime Rate 1 person or 2 person rate depending on work type.

Non-Labor

Non-labor costs (purchase of regulators) is covered in the Capital portion of this testimony in budget category 164.

Assumptions:

[A]: Historical 2005-2009 average number of risers, stopcock changes and small MSA Rebuilds.

[B]: Estimated percent of total orders that will require regulator replacement.

[C]: Estimated incidental time required to change the obsolete regulator.

Note: "Incidental" time is the additional minutes required to complete an order with a regulator change versus an order that does not require a regulator change-out. This time is based on 2009 meter change-outs, as this represents the most current operating conditions.

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[D]	[AxBxCxD]=[E]				[F]	[F]	[F]
Line #	Work Type	Total Orders per Year	Percent Requiring Changeout	Incidental Work Duration (Hrs)	Overtime Crew Rate (1 or 2 person)	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	**Risers**	5,835	34.0%	0.36	$ 100.71	$ 71,929	$ -	**$ 71,929**	**$ 71,929**		0.7	0.7
2	**Stopcock Change**	5,910	34.0%	0.36	$ 48.26	$ 34,907	$ -	**$ 34,907**	**$ 34,907**		0.4	0.4
3	**Small MSA Rebuild**	8,818	34.0%	0.36	$ 48.26	$ 52,084	$ -	**$ 52,084**	**$ 52,084**		0.55	0.55
4					Total Requirement		$ -	$ 158,920	$ 158,920	-	1.65	1.65

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Pedestrian Access at Construction Sites
During hearings on SCG's TY2008 GRC, SCG entered into an agreement with the Disability Rights Advocates (DiRA) to modify SCG's field practices providing for safe pedestrian access around construction sites for disabled individuals. Since that agreement was signed SCG, working with DiRA, has identified materials and procedural changes that address DiRA's concerns. To effectively integrate these changes into daily operations required the purchase of specialized barricades and ramps to be used at the construction site, additional field training on proper use and placement of these devices, and incremental preparation including set up and tear down time at the job site. The calculation of these incremental costs are shown below.

Training Costs: **Includes the inital training for employees to learn how to appropriately construct and dismantle the percautionary devices (ramps and baricades) plus the annual review of this procedure. Initial instruction and annual review will be done at the base location and scheduled by local management. All impacted field employees will be expected to have recieved this training and review.**

Workgroups affected: **Pipeline O&M Field Support**

Methodology: Training for platform contruction and dismantling is calculated as follows:
Count of impacted field employees x average combined rate of impacted employees (based on Labor Agreement schedule) x training duration.

Assumptions:
[A]: Based on impacted classifications, 620 employees have been identified as requiring knowledge to construct and dismantle materials.
[B]: Overtime weighted average labor rate of impacted employees.
[C]: Time required to either complete the intial instruction sessions or the annual review requirements.
[E]: 50% of employee base is anticipated to receive initial training during 2010. The remaining 50% will receive instruction during 2011. Annual review will begin in 2011 and continue into 2012 will all employees in 2012 (and forward) receiving annual review.
[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

Line #		[A] Impacted Employee Count	[B] Avg. Overtime Pay Rate	[C] Training Duration (Hrs)	[A x B x C]=[D] Total per Year	[E] 2010	[E] 2011	[E] 2012	[F] 2010 FTE	[F] 2011 FTE	[F] 2012 FTE
1	Initial Instruction	620	$ 50.77	2	$ 62,950	$ 31,475	$ 31,475	$ -	0.5	0.5	0
2	Annual Review	620	$ 50.77	0.5	$ 15,737	$ -	$ 7,869	$ 7,869	0	0.04	0.04
					Total Requirement	**$ 31,475**	**$ 39,343**	**$ 7,869**	0.5	0.54	0.04

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Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Set up and Dismantling Costs

Workgroups affected:

- **Main Maintenance**
- **Service Maintenance**
- **Cathodic Protection**
- **Measurement & Regulation**

Methodology: The average hourly rate was Incremental time for platform contruction and dismantling is calculated as follows: Total Orders x Estimated percent of total orders requiring DiRA application x Estimated hours to set-up and dismantle equipment x Overtime Crew Rate (2 person)

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders

[B]: Estimated percent of total orders that will require the additional pedestrian access barricades. Based on local field managements assessment of the impact

[C]: Estimated hours to set up related equipment for these orders is 3.5 hrs. This figure was determined by the time it took the manufacturer to set up the equipment during a demonstration (1.75 hours set up only). Since field conditions are less complex for M&R work, the configuration requirements are signficantly less; therefore, M&R work was estimated to take half the time to set up and dismantle (1.75 hrs).

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[D]	[AxBxCxD]=[E]				[F]	[F]	[F]
Line #	Work Group	Total Orders per Year	Percent Requiring Set-up	Work Duration (Hrs)	Overtime Crew Rate (2 person)	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
3	**Main Maintenance**	2,095	4.41%	3.5	$ 100.71	$ 32,566	**$ 32,566**	**$ 32,566**	**$ 32,566**	0.3	0.3	0.3
4	**Service Maintenance**	7,653	6.80%	3.5	$ 100.71	$ 183,430	**$ 183,430**	**$ 183,430**	**$183,430**	1.8	1.8	1.8
5	**Cathodic Protection**	3,123	7.90%	3.5	$ 100.71	$ 86,964	**$ 86,964**	**$ 86,964**	**$ 86,964**	0.8	0.8	0.8
6	**M&R-Dist. Reg. Station**	1,989	46.00%	1.75	$ 111.66	$ 178,784	**$ 178,784**	**$ 178,784**	**$178,784**	1.4	1.4	1.4

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding

Federal Stimulus Funding
The American Recovery and Reinvestment Act of 2009 provided funding to local and state agencies to construct mobility projects that bring value to the local, state and federal economy. This Act apportioned funds to California for highways, local streets and roads, freight and passenger rail, port infrastructure, and transit projects. As Stimulus Funding projects are constructed in local streets and highways, SCG anticipates that this work will result in a greater number of work orders. The calculation of these incremental costs are shown below.

Workgroups affected:

> **Locate and Mark (Depth Checks)**
> **Main Maintenance**
> **Service Maintenance**
> **Cathodic Protection**

Methodology:

The cost for additional labor and non labor in workgroups Locate & Mark, Main Maintenance and Service Maintenance was calculated as follows:

Labor
Total estimated work units x 2005-2009 average hours per unit x overtime labor rate of impacted employees.

Non-Labor
Total estimated work units x 2005-2009 average annual non labor cost per unit.

Note: Work units are either work orders or miles of Main

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Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding

Assumptions:

[A]: Estimated number of units were derived based on stimulus work data received from survey of field managers. The results reflect responses from District managers who have, or expect to have, Federal Stimulus projects in their area.

[B]: 2005-2009 average hours per unit.

[C]: Overtime rate of impacted employees

[E]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[AxBxC]=[D]				[E]	[E]	[E]
Line #	Labor	Estimated Annual Units	Hours per Unit	Overtime Rate	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
1	L&M (Depth Checks)	60	12	$100.71	$72,511	$72,511	$72,511	$72,511	0.7	0.7	0.7
2	Main Maintenance	17	31	$100.71	$53,524	$53,524	$53,524	$53,524	0.5	0.5	0.5
3	Service Maintenance	43	9	$100.71	$39,528	$39,528	$39,528	$39,528	0.4	0.4	0.4
4	Cathodic Protection	193	1.28	$ 48.26	$11,962	$11,962	$11,962	$11,962	0.2	0.2	0.2

Assumptions:

[A]: Estimated number of units were derived based on stimulus work data received from survey of field managers. The results reflect responses from District managers who have, or expect to have, Federal Stimulus projects in their area.

[B]: 2005-2009 average non labor cost per unit.

		[A]	[B]	[A x B]			
Line #	Non Labor	Estimated Annual Units	Avg Annual Non Labor Cost Per Unit	Total per Year	2010	2011	2012
5	L&M (Depth Checks)	60	$ 171.00	$10,260	$10,260	$10,260	$10,260
6	Main Maintenance	17	$ 710.63	$12,081	$12,081	$12,081	$12,081
7	Service Maintenance	43	$ 172.08	$ 7,399	$ 7,399	$ 7,399	$ 7,399
8	Cathodic Protection	193	$ 107.58	$20,762	$20,762	$20,762	$20,762

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Increased City/Municipality Requirements

The construction, operation and maintenance of SCG's vast pipeline system require interaction and compliance with numerous local, state, and federal legislative and regulatory agencies. These agencies continue to impose new and often more stringent administrative planning and field construction operating conditions that can result in increased cost pressures to maintain the gas distribution system. These recent changes in municipality requirements that have led to cost increases for SCG due to mandated night work, engineered traffic control plans, limits on construction hours, increased construction permit costs and increased paving requirements. The calculation of these incremental costs are shown below.

Workgroups affected:

> **Main Maintenance**
> **Service Maintenance**
> **Cathodic Protection**
> **Locate and Mark (Depth Checks)**
> **Measurement & Regulation (M&R): Limits on construction hours only**

Methodology: **The cost for additional labor and non labor was calculated as follows:**

Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated work duration x overtime crew rates

Non-Labor

Total average orders from 2005-2009 x estimated percent of orders impacted x estimated non labor expenses

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units over time.

[B]: Estimated percent of total work units that will be impacted is based on assessment by the operating districts currently experiencing the restrictions.

[C]: Estimated additional hours required to comply with the City/Municipality restrictions. The calculation for durations of work were based on responses by the operating districts currently experiencing the restrictions.

[E] FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

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Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Non Labor Assumptions: [A]: Orders based on 2005-2009 average number of completed orders. Using an average factors in the fluctuations in the completed work units.
[B]: Based upon field assessment of the impacts on the total number of orders.
[C]: Non labor costs are made up of:
Estimated 3rd party contractor labor (provided by operating district personnel)
Historical average costs for 3rd party rentals (night lights, steel plates, etc.)

Night work

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (3 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
1	Main Mtce	2,095	1.50%	1	$ 145.59	$ 4,575	$ 4,575	$ 4,575	$ 4,575	0.05	0.05	0.05
2	Service Mtce	4,230	1.50%	1	$ 145.59	$ 9,238	$ 9,238	$ 9,238	$ 9,238	0.09	0.09	0.09
3	CP Field	3,123	1.50%	1	$ 145.59	$ 6,820	$ 6,820	$ 6,820	$ 6,820	0.06	0.06	0.06
4	L&M (Depth Checks)	994	1.50%	1	$ 146.59	$ 2,186	$ 2,186	$ 2,186	$ 2,186	0.02	0.02	0.02

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
5	Main Mtce	2,095	1.50%	$ 1,720	$ 54,051	$ 54,051	$ 54,051	$ 54,051
6	Service Mtce	4,230	1.50%	$ 1,720	$ 109,134	$ 109,134	$ 109,134	$ 109,134
7	CP Field	3,123	1.50%	$ 1,720	$ 80,573	$ 80,573	$ 80,573	$ 80,573
8	L&M (Depth Checks)	994	1.50%	$ 1,720	$ 25,645	$ 25,645	$ 25,645	$ 25,645

Engineered Traffic Control Plan

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime FPA Rate	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
9	Main Mtce	2,128	7.00%	1	$ 59.94	$ 8,929	$ 8,929	$ 8,929	$ 8,929	0.09	0.09	0.09
10	Service Mtce	4,230	7.00%	1	$ 59.94	$ 17,748	$ 17,748	$ 17,748	$ 17,748	0.17	0.17	0.17
11	CP Field	3,123	7.00%	1	$ 59.94	$ 13,103	$ 13,103	$ 13,103	$ 13,103	0.11	0.11	0.11
12	L&M (Depth Checks)	994	7.00%	1	$ 59.94	$ 4,171	$ 4,171	$ 4,171	$ 4,171	0.04	0.04	0.04

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Engineered Traffic Control Plan (cont'd)

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
13	**Main Mtce**	2,128	7.00%	$ 250	$ 37,240	**$ 37,240**	**$ 37,240**	**$ 37,240**
14	**Service Mtce**	4,230	7.00%	$ 250	$ 74,025	**$ 74,025**	**$ 74,025**	**$ 74,025**
15	**CP Field**	3,123	7.00%	$ 250	$ 54,653	**$ 54,653**	**$ 54,653**	**$ 54,653**
16	**L&M (Depth Checks)**	994	7.00%	$ 250	$ 17,395	**$ 17,395**	**$ 17,395**	**$ 17,395**

Limits on Construction Hours

Line #	Labor	[A] Total Orders per Year	[B] Percent of Jobs Affected	[C] Work Duration (Hrs)	[D] Overtime Crew Rate (2 person)	[AxBxCxD] Total per Year	2010	2011	2012	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
17	**Main Mtce**	2,095	3.00%	1	$ 100.71	$ 6,330	**$ 6,330**	**$ 6,330**	**$ 6,330**	0.1	0.1	0.1
18	**Service Mtce**	4,733	3.00%	1	$ 100.71	$ 14,300	**$ 14,300**	**$ 14,300**	**$ 14,300**	0.1	0.1	0.1
19	**CP Field**	3,123	3.00%	1	$ 100.71	$ 9,436	**$ 9,436**	**$ 9,436**	**$ 9,436**	0.1	0.1	0.1
20	**L&M (Depth Checks)**	994	3.00%	1	$ 100.71	$ 3,003	**$ 3,003**	**$ 3,003**	**$ 3,003**	0.03	0.03	0.03
21	**M&R - Med MSA**	21,095	17%	0.25	$ 48.26	$ 41,998	**$ 41,998**	**$ 41,998**	**$ 41,998**	0.4	0.4	0.4
22	**M&R - Lrg MSA**	17,393	16%	0.25	$ 111.66	$ 77,401	**$ 77,401**	**$ 77,401**	**$ 77,401**	0.8	0.8	0.8
23	**M&R-Distr Reg Sta**	1,534	50.00%	0.5	$ 111.66	$ 42,822	**$ 42,822**	**$ 42,822**	**$ 42,822**	0.4	0.4	0.4

Note: M&R Med MSA is single person

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] Material Costs per Order	[AxBxC] Total per Year	2010	2011	2012
24	**Main Mtce**	2,095	3.00%	$ 550	$ 34,568	**$ 34,568**	**$ 34,568**	**$ 34,568**
25	**Service Mtce**	4,733	3.00%	$ 550	$ 78,095	**$ 78,095**	**$ 78,095**	**$ 78,095**
26	**CP Field**	3,123	3.00%	$ 550	$ 51,530	**$ 51,530**	**$ 51,530**	**$ 51,530**
27	**L&M (Depth Checks)**	994	3.00%	$ 550	$ 16,401	**$ 16,401**	**$ 16,401**	**$ 16,401**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

Note: The assumptions for Increased Permit Fees and Construction Requirements and for Increased Paving Requirements are different from the assumptions above.

Non Labor Assumptions: [A]: Projected orders based on 2005-2009 average number of completed units of work. Using an average factors in the fluctuations in the completed work units over time.
[B]: Field evaluation/estimate of the impacts on the total number of units.
[C, D, E]: Due to steadily increasing permit fees and paving requirements, the estimated increase per order is based on average annual costs from 2005-2009 trended to TY2012.

Increased Permit Fees and Construction Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
28	**Main Mtce**	2,811	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 108,533**	**$ 155,842**	**$205,934**
29	**Service Mtce**	5,417	37.00%	$ 39.00	$ 56.00	$ 74.00	**$ 78,174**	**$ 112,250**	**$148,330**
30	**CP Field**	3,123	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 120,579**	**$ 173,139**	**$228,791**
31	**L&M (Depth Checks)**	994	99.00%	$ 39.00	$ 56.00	$ 74.00	**$ 38,378**	**$ 55,107**	**$ 72,820**

Increased Paving Requirements

Line #	Non-Labor	[A] Total Orders per Year	[B] Percent required	[C] 2010 Incr. NL Costs/ Order	[D] 2011 Incr. NL Costs/ Order	[E] 2012 Incr. NL Costs/ Order	[AxBxC] 2010	[AxBxD] 2011	[AxBxE] 2012
32	**Main Mtce**	2,811	94.00%	$ 35.00	$ 73.00	$ 112.00	**$ 92,482**	**$ 192,891**	**$295,942**
33	**Service Mtce**	5,417	37.00%	$ 35.00	$ 73.00	$ 112.00	**$ 70,156**	**$ 146,326**	**$224,500**
34	**CP Field**	3,123	80.00%	$ 35.00	$ 73.00	$ 112.00	**$ 87,444**	**$ 182,383**	**$279,821**
35	**L&M (Depth Checks)**	994	50.00%	$ 35.00	$ 73.00	$ 112.00	**$ 17,395**	**$ 36,281**	**$ 55,664**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Los Osos City Sewer System

Los Osos City Sewer System
The City of Los Osos in San Luis Obispo County is installing a sewer piping system to replace the existing septic tank systems. This project will encompass the entire city and begins in 2011 continuing through 2013. Additional work by SCG will be required to identify and avoid conflicts with the sewer pipe installation. The calculation of these incremental costs are shown below.

Workgroups affected:

- **Locate and Mark**
  - Depth Checks
  - Locating and Marking
  - Job Observations
- **Main Maintenance**
- **Service Maintenance**

Methodology:

Costs for performing Depth Checks, Main Alterations and Service Alterations is calculated as follows:

Labor
Total estimated orders x 2005-2009 average hours per order x overtime labor rate of impacted employees.

Non-Labor
Total estimated orders x 2005-2009 average annual cost per unit

Labor Assumptions:

[A]: Estimated number of units were derived by field assessment of the impact that the proposed sewer line will have on SCG's existing infrastructure. The Sewer line installation will force SCG to locate, mark and identify the depth of its pipelines. Mains and Services that are in conflict with the proposed sewer line location will need to be altered. Additionally continuous observation will be required where our high priority lines are within 10' of the proposed sewer.

[B]: Estimated hours per order based upon field assesment of the work.
[C]: Overtime rate for impacted employees
[E]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

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Supplemental Workpaper Calculations for incremental costs related to Los Osos City Sewer System

Line #	Labor	[A] Estimated Total Units	[B] Hours per Order	[C] Overtime Rate	[A x B x C]=[D] Total Project Cost	2010	2011 (20%)	2012 (70%)	[E] 2010 FTE	[E] 2011 FTE	[E] 2012 FTE
1	**L&M (Depth Checks)**	98	12	$ 100.71	$ 120,156	$ -	**$ 24,031**	**$ 84,109**	0	0.2	0.8
2	**Locating and Marking**	5,763	0.21	$ 48.26	$ 59,304	$ -	**$ 11,861**	**$ 41,513**	0	0.1	0.4
3	**Job Observations**	319	4.00	$ 48.26	$ 61,573	$ -	**$ 12,315**	**$ 43,101**	0	0.1	0.4
4	**Main Alterations**	75	32	$ 100.71	$ 241,704	$ -	**$ 48,341**	**$169,193**	0	0.5	1.6
5	**Service Alterations**	513	6	$ 100.71	$ 307,509	$ -	**$ 61,502**	**$215,256**	0	0.6	2.1

Non-Labor Assumptions:

[A]: Estimated number of units were derived by field assessment of the impact that the proposed sewer line will have on SCG's existing infrastructure. The Sewer line installation will force SCG to locate, mark and identify the depth of its pipelines. Mains and Services that are in conflict with the proposed sewer line location will need to be altered. Additionally continuous observation will be required where our high priority lines are within 10' of the proposed sewer.

[B]: 2005-2009 average non-labor cost per unit

Line #	Non Labor	[A] Estimated Total Units	[B] Avg Annual Non Labor Cost Per Unit	[A x B] Total per Year	2010	2011 (20%)	2012 (70%)
6	**L&M (Depth Checks)**	98	$ 171.00	$ 16,758	$ -	**$ 3,352**	**$ 11,731**
7	**Locate and Mark**	0	$ -	$ -	$ -	$ -	$ -
8	**Job Observations**	0	$ -	$ -	$ -	$ -	$ -
9	**Main Alterations**	75	$ 6,742	$ 505,667	$ -	**$101,133**	**$353,967**
10	**Service Alterations**	513	$ 103	$ 52,734	$ -	**$ 10,547**	**$ 36,914**

Beginning of Workpaper
2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub 7. Field Support
Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Activity Description:

Recorded to this work group are labor expenses for field supervision, operating district clerical employees, dispatch employees, and time of field employees attending meetings and skills training. Also included are non labor expenses for office supplies, communication devices and materials and other elements for field maintenance work. These labor activities and non-labor materials are necessary support costs to completing field operations, maintenance and construction work.

Forecast Methodology:

Labor - Base YR Rec

Forecasted 2010 labor expenses are anticipated to remain flat and equal the 2009 Base year. However for TY2012 SCG has estimated the expense requirements based on a five year average. This average will factor in the high and low labor expenses which occur in this work group primarily as the result of fluctuations in meetings and training costs. To the five year average foundation, incremental costs are forecasted as a result of (1) additional training of field employees in the use of new technology tools related to OpEx initiatives; (2) additional funding required for the new Area Resource Scheduling Organization as a result of the implementation of OpEx Initiatives; (3) annual procedural training for the set up and dismantling of pedestrian access ramps related to the agreement with the Disability Rights Advocates (DIRA); and (4) additional dispatch time required as a result of incremental field requirements in Pipeline Operations and Maintenance work groups.

Non-Labor - Base YR Rec

Forecasted 2010 non labor expenses are anticipated to equal the 2009 Base year. However for TY2012 SCG has estimated the expense requirements based on a five year average. This average will factor in the high and low non labor expense levels which occur in this work group due to the wide variety of elements that are charged here in support of field activities. To the five year average foundation, incremental costs are forecasted as a result of monthly wireless fees for the Mobile Data Terminals (MDTs) being rolled out as a result of OpEx initiatives.

NSE - Base YR Rec

NSE is not applicable to this work group.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	12,878	13,136	12,967	12,462	12,513	15,020	13,627	16,066
Non-Labor	2,425	2,613	2,306	2,055	1,898	2,202	2,381	2,543
NSE	0	0	0	0	0	0	0	0
Total	15,303	15,749	15,273	14,517	14,411	17,222	16,008	18,609
FTE	172.5	173.0	170.9	163.1	157.4	183.0	172.7	198.1

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 7. Field Support
Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	Base YR Rec	12,513	12,513	12,513	2,507	1,114	3,553	15,020	13,627	16,066
Non-Labor	Base YR Rec	1,898	1,898	1,898	304	483	645	2,202	2,381	2,543
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		14,411	14,411	14,411	2,811	1,597	4,198	17,222	16,008	18,609
FTE	Base YR Rec	157.4	157.4	157.4	25.6	15.3	40.7	183.0	172.7	198.1

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010	0	304	0	304	0.0	1-Sided Adj

B: Additional funding required for monthly wireless fees for the Mobile Data Terminals (MDTs) being rolled out as a result of OpEx initiatives.

2010	0	0	0	0	25.6	1-Sided Adj

A: Incremental funding required in the following areas: (1) additional training of field employees in the use of new technology tools related to OpEx initiatives; (2) additional funding required for the new Area Resource Scheduling Organization as a result of the implementation of OpEx Initiatives; (3) annual procedural training for the set up and dismantling of pedestrian access ramps related to the agreement with the Disability Rights Advocates (DIRA); and (4) additional dispatch time required as a result of incremental field requirements in Pipeline Operations and Maintenance work groups.

2010	2,507	0	0	2,507	0.0	1-Sided Adj

A: Incremental funding required in the following areas: (1) additional training of field employees in the use of new technology tools related to OpEx initiatives; (2) additional funding required for the new Area Resource Scheduling Organization as a result of the implementation of OpEx Initiatives; (3) annual procedural training for the set up and dismantling of pedestrian access ramps related to the agreement with the Disability Rights Advocates (DIRA); and (4) additional dispatch time required as a result of incremental field requirements in Pipeline Operations and Maintenance work groups.

2010 Total	**2,507**	**304**	**0**	**2,811**	**25.6**

2011	0	305	0	305	0.0	1-Sided Adj

B: Additional funding required for monthly wireless fees for the Mobile Data Terminals (MDTs) being rolled out as a result of OpEx initiatives.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 7. Field Support
Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
2011	948	0	0	948	0.0	1-Sided Adj
A: Incremental funding required in the following areas: (1) additional training of field employees in the use of new technology tools related to OpEx initiatives; (2) additional funding required for the new Area Resource Scheduling Organization as a result of the implementation of OpEx Initiatives; (3) annual procedural training for the set up and dismantling of pedestrian access ramps related to the agreement with the Disability Rights Advocates (DIRA); and (4) additional dispatch time required as a result of incremental field requirements in Pipeline Operations and Maintenance work groups.						
2011	0	0	0	0	10.3	1-Sided Adj
A: Incremental funding required in the following areas: (1) additional training of field employees in the use of new technology tools related to OpEx initiatives; (2) additional funding required for the new Area Resource Scheduling Organization as a result of the implementation of OpEx Initiatives; (3) annual procedural training for the set up and dismantling of pedestrian access ramps related to the agreement with the Disability Rights Advocates (DIRA); and (4) additional dispatch time required as a result of incremental field requirements in Pipeline Operations and Maintenance work groups.						
2011	166	0	0	166	0.0	1-Sided Adj
C: Incremental labor dollars representing the forecast which is a mid-way point between 2010 and the 2012 forecast.						
2011	0	178	0	178	0.0	1-Sided Adj
C: Incremental non labor dollars representing the forecast which is a mid-way point between 2010 and the 2012 forecast.						
2011	0	0	0	0	5.0	1-Sided Adj
C: Incremental FTES representing the forecast which is a mid-way point between 2010 and the 2012 forecast.						
2011 Total	**1,114**	**483**	**0**	**1,597**	**15.3**	
2012	0	290	0	290	0.0	1-Sided Adj
B: Additional funding required for monthly wireless fees for the Mobile Data Terminals (MDTs) being rolled out as a result of OpEx initiatives.						
2012	3,221	0	0	3,221	0.0	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
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Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
A: Incremental funding required in the following areas: (1) additional training of field employees in the use of new technology tools related to OpEx initiatives; (2) additional funding required for the new Area Resource Scheduling Organization as a result of the implementation of OpEx Initiatives; (3) annual procedural training for the set up and dismantling of pedestrian access ramps related to the agreement with the Disability Rights Advocates (DIRA); and (4) additional dispatch time required as a result of incremental field requirements in Pipeline Operations and Maintenance work groups.						
2012	0	0	0	0	30.7	1-Sided Adj
A: Incremental funding required in the following areas: (1) additional training of field employees in the use of new technology tools related to OpEx initiatives; (2) additional funding required for the new Area Resource Scheduling Organization as a result of the implementation of OpEx Initiatives; (3) annual procedural training for the set up and dismantling of pedestrian access ramps related to the agreement with the Disability Rights Advocates (DIRA); and (4) additional dispatch time required as a result of incremental field requirements in Pipeline Operations and Maintenance work groups.						
2012	332	0	0	332	0.0	1-Sided Adj
C: Incremental labor dollars representing the five year average forecast.						
2012	0	355	0	355	0.0	1-Sided Adj
C: Incremental non labor dollars representing the five year average forecast.						
2012	0	0	0	0	10.0	1-Sided Adj
Incremental FTEs representing the five year average forecast.						
2012 Total	**3,553**	**645**	**0**	**4,198**	**40.7**	

Area: GAS DISTRIBUTION
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Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	10,927	11,582	11,401	10,132	10,501
Non-Labor	2,160	2,499	2,252	2,046	1,898
NSE	0	0	0	0	0
Total	13,087	14,081	13,653	12,178	12,399
FTE	163.4	167.0	159.9	135.4	132.4
Adjustments (Nominal $) **					
Labor	-1,099	-1,341	-983	59	97
Non-Labor	0	-86	-53	15	0
NSE	0	0	0	0	0
Total	-1,099	-1,427	-1,036	73	97
FTE	-17.3	-20.8	-15.3	0.8	0.0
Recorded-Adjusted (Nominal $)					
Labor	9,828	10,242	10,418	10,190	10,598
Non-Labor	2,160	2,412	2,200	2,061	1,898
NSE	0	0	0	0	0
Total	11,988	12,654	12,617	12,251	12,496
FTE	146.1	146.2	144.6	136.2	132.4
Vacation & Sick (Nominal $)					
Labor	1,676	1,830	1,818	1,964	1,915
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	1,676	1,830	1,818	1,964	1,915
FTE	26.4	26.8	26.3	26.9	25.0
Escalation to 2009$					
Labor	1,374	1,064	731	308	0
Non-Labor	265	201	106	-5	0
NSE	0	0	0	0	0
Total	1,639	1,265	837	303	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	12,878	13,136	12,967	12,462	12,513
Non-Labor	2,425	2,613	2,306	2,055	1,898
NSE	0	0	0	0	0
Total	15,303	15,749	15,272	14,517	14,411
FTE	172.5	173.0	170.9	163.1	157.4

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 7. Field Support
Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	-1,099	-1,341	-983	59	97
Non-Labor	0	-86	-53	15	0
NSE	0	0	0	0	0
Total	-1,099	-1,427	-1,036	73	97
FTE	-17.3	-20.8	-15.3	0.8	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005	88	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009091 1101803740
Adjustment necessary to bring charging of front- line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-0731 (Ramona DOM cost center).							
2005	0	0	0	1.3	1-Sided Adj	N/A	TP1MTC2009091 1101838960
FTE adjustment necessary to bring charging of front line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-0731 (Ramona DOM cost center).							
2005	-1,187	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8104449090
Transfer of MSA maintenance expense to Service Mtce work group 2GD000.004 to align years 2005-2007 with current charging of this activity.							
2005	0	0	0	-18.6	1-Sided Adj	N/A	TP1MTC2010020 8104601993
Transfer of MSA maintenance expense to Service Mtce work group 2GD000.004 to align years 2005-2007 with current charging of this activity.							
2005 Total	**-1,099**	**0**	**0**	**-17.3**			
2006	-1,341	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8105435677
Transfer of MSA maintenance expense to Service Mtce work group 2GD000.004 to align years 2005-2007 with current charging of this activity.							
2006	0	-86	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8105535583
Transfer of MSA maintenance expense to Service Mtce work group 2GD000.004 to align years 2005-2007 with current charging of this activity.							

Area: GAS DISTRIBUTION
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Category: A. Field Operations & Maintenance
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Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2006	0	0	0	-20.8	1-Sided Adj	N/A	TP1MTC2010020 8105640460
Transfer of MSA maintenance expense to Service Mtce work group 2GD000.004 to align years 2005-2007 with current charging of this activity.							
2006 Total	**-1,341**	**-86**	**0**	**-20.8**			
2007	72	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009091 1102029400
Adjustment necessary to bring charging of front line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-3630 (AV/SA DOM cost center).							
2007	0	10	0	0.0	1-Sided Adj	N/A	TP1MTC2009091 1102132950
Adjustment necessary to bring charging of front line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-3630 (AV/SA DOM cost center).							
2007	0	0	0	0.8	1-Sided Adj	N/A	TP1MTC2009091 1102215683
FTE adjustment necessary to bring charging of front line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-3630 (AV/SA DOM cost center).							
2007	-1,055	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8110316263
Transfer of MSA maintenance expense to Service Mtce work group 2GD000.004 to align years 2005-2007 with current charging of this activity.							
2007	0	-62	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8110408170
Transfer of MSA maintenance expense to Service Mtce work group 2GD000.004 to align years 2005-2007 with current charging of this activity.							
2007	0	0	0	-16.1	1-Sided Adj	N/A	TP1MTC2010020 8110531487
Transfer of MSA maintenance expense to Service Mtce work group 2GD000.004 to align years 2005-2007 with current charging of this activity.							
2007 Total	**-983**	**-53**	**0**	**-15.3**			
2008	-19	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1145841003
Adjustment (decrease) due to labor for Mains expense which should be in Mains work group GD000.003. Thus a corresponding adjustment (increase) is shown in said work group.							

Area: GAS DISTRIBUTION
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Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2008	78	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009091 1102322453
Adjustment necessary to bring charging of front line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-3630 (AV/SA DOM cost center).							
2008	0	15	0	0.0	1-Sided Adj	N/A	TP1MTC2009091 1102441343
Adjustment necessary to bring charging of front line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-3630 (AV/SA DOM cost center).							
2008	0	0	0	0.8	1-Sided Adj	N/A	TP1MTC2009091 1102605923
FTE adjustment necessary to bring charging of front line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-3630 (AV/SA DOM cost center).							
2008 Total	**59**	**15**	**0**	**0.8**			
2009	23	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010040 9122907223
Adjustment necessary to bring charging of front line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-3630 (AV/SA DOM cost center).							
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010040 9122931723
Adjustment necessary to bring charging of front line supervision in alignment with current charging, which is 100% non shared SCG. Corresponding adjustment decrease in USS cost center 2100-3630 (AV/SA DOM cost center).							
2009	74	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3084923907
Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.							
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3111423077
Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.							
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3112143647
Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
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Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3112813773
Adjustment for the union retroactive wage increase which was charged to the small tools clearing account. Corresponding adjustment is shown in the Tools, Fittings, & Materials work group.							
2009 Total	**97**	**0**	**0**	**0.0**			

Supplemental Workpapers for Workpaper 2GD000.000

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Wireless Fees for Mobile Data Terminals (MDT)

Wireless Fees for Mobile Data Terminals (MDT)

Begining 2010 maintenance and inspection (M&I) work will be dispatched to field technicians via MDT computers. In order to utilize the full capability that the MDT has to offer, the computer must be in constant communication with the host scheduling system. This will be accomplished through existing wireless networks within the service territory. Remaining online allows for work to be dispatched to the crews in the field if the pre-assigned tasks are completed early, or conversely, reassign work if an unexpected higher priority maintenance activity is encountered such as a report of a gas leak that must be investigated. Real-time connectivity between field employees, supervisors and the dispatchers is essential to gain efficiencies provided by the ability to adapt to changes in work priority and the identification of available resources near a given location. The calculation of the incremental costs for wireless fees are shown below.

Workgroups affected: **Field Support**

Methodology: **Costs for the additional wireless fees is calculated as follows:**

Non-Labor
Number of vehicles requiring a MDT x Incremental projected annual wireless fees

Assumptions:

[A]: Number of vehicles equipped with an MDT. Equals impacted field employees and supervisors.

[B]: For field employees the 2010 cost is estimated based on current cost per month ($47) multiplied by 8 months due to MDT rollout in May 2010; however, Supervisor expense is calculated at $47 multiplied by 12 month since these MDTs were fully deployed by January 2010.

[C]: 2011 cost per month -- at assumed reduced rate ($35) -- multiplied by 12 months

[D]: 2012 cost per month -- at assumed reduced rate ($33.25) -- multiplied by 12 months.

Line #		[A]	[B]	[C]	[D]	[AxB]	[AxC]	[AxD]
		Vehicles with MDTs	2010 Estimated Annual Cost per Unit	2011 Estimated Annual Cost per Unit	2012 Estimated Annual Cost per Unit	2010	2011	2012
1	**Field Employees**	566	$ 376	$ 420	$ 399	**$ 212,816**	**$ 237,720**	**$ 225,834**
2	**Supervisors**	161	$ 564	$ 420	$ 399	**$ 90,804**	**$ 67,620**	**$ 64,239**
3				Total Requirement		$ 303,620	$ 305,340	$ 290,073

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to the Area Resource Scheduling Organization

Area Resource Scheduling Organization
Prior to 2010 dispatching activities were predominately a manual and labor-intensive process to schedule, assign, dispatch and coordinate resources and work orders. With the recent introduction of new technology the Dispatch Operations have been reorganized to respond to automation and improvements to the dispatching processes. The new Area Resource Scheduling Organization (ARSO) will utilize the technology and communication devices made available through the Forecasting, Scheduling and Dispatch (FSD) technology implemented under the OpEx 20/20 Program. (Discussed in the prepared direct testimony of witness Mr. Richard. Phillips.) Six incremental O&M Scheduling Advisors are necessary to effectuate the use of these new technical and process changes. The calculation of these incremental costs are shown below.

Workgroups affected:

> Field Support

Methodology: **Costs for the additional O&M Scheduling Advisors is calculated as follows:**

Labor
Incremental O&M scheduling advisors x Estimated salary

Labor Assumptions:

[A]: Number of Scheduling Advisors assigned to O&M activities. This is now a regular position in the new ARSO organization.
[B]: Approximate salary based on average Management pay scales for Advisor positions.

Line #		[A] Scheduling Advisors	[B] Salary	[AxB] Total per Year
1	**2010**	6.0	$ 85,000	$ 510,000
2	**2011**	5.4	$ 85,000	$ 459,000
3	**2012**	5.4	$ 85,000	$ 459,000

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Supplemental Workpaper Calculations for incremental costs related to Miscellaneous Increased Support Requirements

Miscellaneous Increased Support Requirements
During the execution of many work elements, dispatch operations remains the hub between the field personnel, technical experts, contractor representatives and city officials for communication, coordination and scheduling of work. Because of incremental work elements projected within this GRC period, work requirements within dispatch operations will increase. Increasing work hour restrictions imposed by local municipalities, incremental work resulting from the availability of federal stimulus funds, and requirements to remove USA paint markings, will be create more phone calls between dispatch operations and field employees and/or with city officials. The calculation of these incremental costs is shown below.

Workgroups affected:
> **Field Support**

Methodology: **Costs for Increased Support Requirements is calculated as follows:**

Labor
Number of orders affected by incremental City/Municipality restrictions on work hours, Federal Stimulus Work and USA Paint Markings removal x Estimated incremental Dispatcher time x Dispatcher overtime rate.

Assumptions: [A]: Number of affected orders were taken from the Supplemental Workpapers for: City/Municipality Restrictions; Federal Stimulus Work and USA Paint Marking Removal.

[B] Based upon field assessment of the impact on the total number of orders.

[D]: Estimated incremental Dispatcher time is based on information provided by Dispatch personnel based on historical experience. More Dispatcher time was allocated for Work Hour Restrictions and Federal Stimulus Work because these activities require more phone calls, coordination and re-scheduling than USA paint marking removal.

[G]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

Line #	Supplemental Work Paper	[A] Total Annual Orders	[B] % Impacted	[AxB]=[C] Total Impacted Orders	[D] Incr. Dispatcher Time	[E] Overtime Dispatcher Rate	[CxDxE]=[F] Total per Year	2010	2011	2012	[G] 2010 FTE	[G] 2011 FTE	[G] 2012 FTE
	City/Muni. Req. - Limits on Constr. Hours												
1	>>Impact: Main Maintenance	2,095	3%	63	0.25	$ 48.26	$ 758	$ 758	$ 758	$ 758			
2	>>Impact: Service Maintenance	4,733	3%	142	0.25	$ 48.26	$ 1,713	$ 1,713	$ 1,713	$ 1,713			
3	>>Impact: Cathodic Protection	3,123	3%	94	0.25	$ 48.26	$ 1,130	$ 1,130	$ 1,130	$ 1,130			
4	>>Impact: L&M (Depth Checks)	994	3%	30	0.25	$ 48.26	$ 360	$ 360	$ 360	$ 360			
5	**Sub-Total: Limits on Constr. Hours**	10,945		328				$ 3,961	$ 3,961	$ 3,961			
	Federal Stimulus Work												
6	>>Impact: Main Maintenance	17	100%	17	0.25	$ 48.26	$ 205	$ 205	$ 205	$ 205			
7	>>Impact: Service Maintenance	43	100%	43	0.25	$ 48.26	$ 519	$ 519	$ 519	$ 519			
8	>>Impact: Cathodic Protection	193	100%	193	0.25	$ 48.26	$ 2,328	$ 2,328	$ 2,328	$ 2,328			
9	>>Impact: L&M (Depth Checks)	60	100%	60	0.25	$ 48.26	$ 724	$ 724	$ 724	$ 724			
10	**Sub-Total: Federal Stimulus Work**	313		313				$ 3,776	$ 3,776	$ 3,776			
11	**USA Paint Markings Removal**	13,866	15%	2,080	0.15	$ 48.26	$ 15,055	$15,055	$15,055	$15,055			
12						**Total Requirement**		$22,792	$22,792	$22,792	0.3	0.3	0.3

Southern California Gas Company – Gas Distrubtion – Witness Gina Orozco-Mejia
Supplemental Workpaper Calculations For Incremental Costs
Forecast, Schedule and Dispatch (FSD) Technology and Geographic Information System (GIS)

Support Training for New Technologies (Additional details on the OpEx 20/20 Programs for M&I, Construction and GIS are included in the prepared direct testimony of Mr. Richard Phillips)

Through the OpEx 20/20 Program new technology is being developed and deployed to enhance SCG's field and office work processes related to Maintenance and Inspection (M&I) activities in 2010 and Construction activities in 2012. Beginning in 2010 M&I work will be electronically dispatched to, and recorded by, field personnel via a Mobile Data Terminal (MDT). In 2012 the dispatch and recording of Construction activities will similarly be completed by the field on their MDTs. In addition construction planning and job management activities will migrate to a new Work Management system. Because M&I work and Construction work are core elements to system reliability and safe operations, it is imperative that the people performing the work are effectively trained on the new systems.

Also rolling out in 2010 and 2011 is the OpEx 20/20 Program for Geographical Information Systems (GIS). Field and Office employees will be trained on how to review, extract and update asset records. .

Given that today's level of field staffing is just sufficient to perform the necessary distribution pipeline maintenance, inspection and construction activities, additional overtime hours will be incurred by field employees to accommodate the training activities for this new scheduling system. The calculation of these incremental costs is shown below.

Workgroups affected:	**Pipeline O&M Field Support**
Methodology:	Training for use of technology introduced with the M&I, Construction and GIS OpEx Initiative programs is calculated as follows: Count of impacted field employees x average hourly Over time rate x number of days of training required
Assumptions:	[A]: Identified classification of impacted non-management employees. Classification provided by OpEx team. [B]: Employee count within each classification [C], [D]: Wage rate applicable to employee classification and comparable over-time rate. [E]: Estimated days of training for each classificaiton of employee. Provided by OpEx Team. [F]: = [B] x [D] x [E for any given year] x 8 hours/day [G]: FTEs calculated by dividing the incremental labor dollars by the hourly rate dividied by full time equivalent hours = [F/D/2080]

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Supplemental Workpaper Calculations For Incremental Costs

Forecast, Schedule and Dispatch (FSD) Technology and Geographic Information System (GIS)

Line #	[A] Classifications Needing Training	[B] Emp Count	[C] Wage Rate	[D] OT Rate	[E] 2010 Training Days	[E] 2011 Training Days	[E] 2012 Training Days	[F] 2010 Training Costs	[F] 2011 Training Costs	[F] 2012 Training Costs	[G] 2010 FTE	[G] 2011 FTE	[G] 2012 FTE
1	Constrn Tech	295	$ 29.92	$ 44.88	5.00	1.00	5.00	$ 529,584	$ 105,917	$ 529,584	5.7	1.1	5.7
2	Disp Spec	28	$ 32.17	$ 48.26	6.00	1.00	5.00	$ 64,855	$ 10,809	$ 54,046	0.6	0.1	0.5
3	District Ops Clerk-4	52	$ 29.92	$ 44.88	6.00	1.00	5.00	$ 112,020	$ 18,670	$ 93,350	1.2	0.2	1.0
4	Engy Tech - Dist	188	$ 32.17	$ 48.26	5.00	1.00	5.00	$ 362,878	$ 72,576	$ 362,878	3.6	0.7	3.6
5	Fld Plng Assoc	124	$ 39.96	$ 59.94	1.00	1.00	15.00	$ 59,460	$ 59,460	$ 891,907	0.5	0.5	7.2
6	Ld Constrn Tech	243	$ 37.22	$ 55.83	5.00	1.00	5.00	$ 542,668	$ 108,534	$ 542,668	4.7	0.9	4.7
7	Ld Disp Spec	3	$ 37.22	$ 55.83	6.00	1.00	5.00	$ 8,040	$ 1,340	$ 6,700	0.1	0.0	0.1
8	Ld Mtr & Reg Tech	20	$ 39.96	$ 59.94	6.00	1.00	5.00	$ 57,542	$ 9,590	$ 47,952	0.5	0.1	0.4
9	Meas Spec	11	$ 37.22	$ 55.83	5.00	1.00	5.00	$ 24,565	$ 4,913	$ 24,565	0.2	0.0	0.2
10	Mtr & Regulator Clerk - 4	10	$ 29.92	$ 44.88	6.00	1.00	5.00	$ 21,542	$ 3,590	$ 17,952	0.2	0.0	0.2
11	Mtr & Regulator Tech #1	60	$ 34.74	$ 52.11	5.00	1.00	5.00	$ 125,064	$ 25,013	$ 125,064	1.2	0.2	1.2
12	Mtr & Regulator Tech #2	18	$ 32.17	$ 48.26	5.00	1.00	5.00	$ 34,744	$ 6,949	$ 34,744	0.3	0.1	0.3
13	**All Bases Totaled**	**1052**						**$ 1,942,962**	**$ 427,361**	**$2,731,409**	**18.8**	**4.0**	**25.0**

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Pedestrian Access at Construction Sites
During hearings on SCG's TY2008 GRC, SCG entered into an agreement with the Disability Rights Advocates (DiRA) to modify SCG's field practices providing for safe pedestrian access around construction sites for disabled individuals. Since that agreement was signed SCG, working with DiRA, has identified materials and procedural changes that address DiRA's concerns. To effectively integrate these changes into daily operations required the purchase of specialized barricades and ramps to be used at the construction site, additional field training on proper use and placement of these devices, and incremental preparation including set up and tear down time at the job site. The calculation of these incremental costs are shown below.

Training Costs: **Includes the inital training for employees to learn how to appropriately construct and dismantle the percautionary devices (ramps and baricades) plus the annual review of this procedure. Initial instruction and annual review will be done at the base location and scheduled by local management. All impacted field employees will be expected to have recieved this training and review.**

Workgroups affected: **Pipeline O&M Field Support**

Methodology: Training for platform contruction and dismantling is calculated as follows:
Count of impacted field employees x average combined rate of impacted employees (based on Labor Agreement schedule) x training duration.

Assumptions:

[A]: Based on impacted classifications, 620 employees have been identified as requiring knowledge to construct and dismantle materials.

[B]: Overtime weighted average labor rate of impacted employees.

[C]: Time required to either complete the intial instruction sessions or the annual review requirements.

[E]: 50% of employee base is anticipated to receive initial training during 2010. The remaining 50% will receive instruction during 2011. Annual review will begin in 2011 and continue into 2012 will all employees in 2012 (and forward) receiving annual review.

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

Line #		[A] Impacted Employee Count	[B] Avg. Overtime Pay Rate	[C] Training Duration (Hrs)	[A x B x C]=[D] Total per Year	[E] 2010	[E] 2011	[E] 2012	[F] 2010 FTE	[F] 2011 FTE	[F] 2012 FTE
1	Initial Instruction	620	$ 50.77	2	$ 62,950	$ 31,475	$ 31,475	$ -	0.5	0.5	0
2	Annual Review	620	$ 50.77	0.5	$ 15,737	$ -	$ 7,869	$ 7,869	0	0.04	0.04
					Total Requirement	**$ 31,475**	**$ 39,343**	**$ 7,869**	0.5	0.54	0.04

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Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites

Set up and Dismantling Costs

Workgroups affected:

- **Main Maintenance**
- **Service Maintenance**
- **Cathodic Protection**
- **Measurement & Regulation**

Methodology: The average hourly rate was Incremental time for platform contruction and dismantling is calculated as follows: Total Orders x Estimated percent of total orders requiring DiRA application x Estimated hours to set-up and dismantle equipment x Overtime Crew Rate (2 person)

Labor Assumptions:

[A]: Orders based on 2005-2009 average number of completed orders

[B]: Estimated percent of total orders that will require the additional pedestrian access barricades. Based on local field managements assessment of the impact

[C]: Estimated hours to set up related equipment for these orders is 3.5 hrs. This figure was determined by the time it took the manufacturer to set up the equipment during a demonstration (1.75 hours set up only). Since field conditions are less complex for M&R work, the configuration requirements are signficantly less; therefore, M&R work was estimated to take half the time to set up and dismantle (1.75 hrs).

[F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. Average annual salary is $70,000 x 1.5 = $105,000

		[A]	[B]	[C]	[D]	[AxBxCxD]=[E]				[F]	[F]	[F]
Line #	Work Group	Total Orders per Year	Percent Requiring Set-up	Work Duration (Hrs)	Overtime Crew Rate (2 person)	Total per Year	2010	2011	2012	2010 FTE	2011 FTE	2012 FTE
3	**Main Maintenance**	2,095	4.41%	3.5	$ 100.71	$ 32,566	**$ 32,566**	**$ 32,566**	**$ 32,566**	0.3	0.3	0.3
4	**Service Maintenance**	7,653	6.80%	3.5	$ 100.71	$ 183,430	**$ 183,430**	**$ 183,430**	**$183,430**	1.8	1.8	1.8
5	**Cathodic Protection**	3,123	7.90%	3.5	$ 100.71	$ 86,964	**$ 86,964**	**$ 86,964**	**$ 86,964**	0.8	0.8	0.8
6	**M&R-Dist. Reg. Station**	1,989	46.00%	1.75	$ 111.66	$ 178,784	**$ 178,784**	**$ 178,784**	**$178,784**	1.4	1.4	1.4

Beginning of Workpaper
2GD000.005 - Pipeline O&M-Tools, Fittings & Materials

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub 8. Tools, Fittings & Materials
Workpaper: 2GD000.005 - Pipeline O&M-Tools, Fittings & Materials

Activity Description:

Recorded to this work group are small tools, small pipe fittings and miscellaneous installing materials used in distribution construction and maintenance work. Also included are expenses for the rental of uniforms and laundering thereof.

Forecast Methodology:

Labor - Base YR Rec

Labor is not applicable to this work group.

Non-Labor - Base YR Rec

Forecasted 2010 labor expenses are anticipated to remain flat and equal the 2009 Base year. However, for TY2012 SCG has estimated the expense requirements based on a five year average. With anticipated improvements in economic conditions, the level of construction and maintenance work is expected to increase, with a corresponding increase in the associated non labor expense for tools, fittings and installing materials. Using a five year average captures the high and low expenditures seen under a variety of economic conditions. To this five year average foundation, incremental funding is forecasted for the purchase of newly designed safety vests as required by Cal OSHA and the DOT. The new standards have more stringent safety requirements and are more costly to manufacture.

NSE - Base YR Rec

NSE is not applicable to this work group.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	1	0	1	0	0	0	0	0
Non-Labor	10,912	11,291	10,501	9,368	8,620	8,653	9,399	10,145
NSE	0	0	0	0	0	0	0	0
Total	10,913	11,291	10,502	9,368	8,620	8,653	9,399	10,145
FTE	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.4	-0.4

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 8. Tools, Fittings & Materials
Workpaper: 2GD000.005 - Pipeline O&M-Tools, Fittings & Materials

Forecast Summary:

		In 2009 $(000)								
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	Base YR Rec	0	0	0	0	0	0	0	0	0
Non-Labor	Base YR Rec	8,620	8,620	8,620	33	779	1,525	8,653	9,399	10,145
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		8,620	8,620	8,620	33	779	1,525	8,653	9,399	10,145
FTE	Base YR Rec	-0.4	-0.4	-0.4	0.0	0.0	0.0	-0.4	-0.4	-0.4

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010	0	33	0	33	0.0	1-Sided Adj

A: Incremental funding required for the purchase of newly designed safety vests as required by Cal OSHA and the DOT. The new standards have more stringent safety requirements and are more costly to manufacture.

2010 Total	**0**	**33**	**0**	**33**	**0.0**	

2011	0	746	0	746	0.0	1-Sided Adj

B: Incremental non labor dollars representing the forecast which is a mid-way point between 2010 and the 2012 forecast which is based on the 5 year average.

2011	0	33	0	33	0.0	1-Sided Adj

A: Incremental funding required for the purchase of newly designed safety vests as required by Cal OSHA and the DOT. The new standards have more stringent safety requirements and are more costly to manufacture.

2011 Total	**0**	**779**	**0**	**779**	**0.0**	

2012	0	1,492	0	1,492	0.0	1-Sided Adj

B: Incremental non labor dollars representing the forecast for TY2012 which is based on the 5 year average.

2012	0	33	0	33	0.0	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 8. Tools, Fittings & Materials
Workpaper: 2GD000.005 - Pipeline O&M-Tools, Fittings & Materials

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type

A: Incremental funding required for the purchase of newly designed safety vests as required by Cal OSHA and the DOT. The new standards have more stringent safety requirements and are more costly to manufacture.

2012 Total	**0**	**1,525**	**0**	**1,525**	**0.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 8. Tools, Fittings & Materials
Workpaper: 2GD000.005 - Pipeline O&M-Tools, Fittings & Materials

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	1	0	1	0	996
Non-Labor	9,719	10,424	8,586	6,342	6,176
NSE	0	0	0	0	0
Total	9,720	10,424	8,587	6,342	7,172
FTE	0.0	0.0	0.0	0.0	-0.3
Adjustments (Nominal $) **					
Labor	0	0	0	0	-996
Non-Labor	0	0	1,433	3,049	2,444
NSE	0	0	0	0	0
Total	0	0	1,433	3,049	1,448
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	1	0	1	0	0
Non-Labor	9,719	10,424	10,019	9,391	8,620
NSE	0	0	0	0	0
Total	9,720	10,424	10,020	9,392	8,620
FTE	0.0	0.0	0.0	0.0	-0.3
Vacation & Sick (Nominal $)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	-0.1
Escalation to 2009$					
Labor	0	0	0	0	0
Non-Labor	1,193	867	482	-23	0
NSE	0	0	0	0	0
Total	1,193	867	482	-23	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	1	0	1	0	0
Non-Labor	10,912	11,291	10,501	9,368	8,620
NSE	0	0	0	0	0
Total	10,913	11,291	10,502	9,368	8,620
FTE	0.0	0.0	0.0	0.0	-0.4

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 8. Tools, Fittings & Materials
Workpaper: 2GD000.005 - Pipeline O&M-Tools, Fittings & Materials

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	0	0	0	0	-996
Non-Labor	0	0	1,433	3,049	2,444
NSE	0	0	0	0	0
Total	0	0	1,433	3,049	1,448
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005 Total	**0**	**0**	**0**	**0.0**			
2006 Total	**0**	**0**	**0**	**0.0**			
2007	0	1,433	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3080002157
Adjustment necessary to reflect charging of precharge fittings as 100% O&M. Capital reassignments will then be handled in the RO model as per usual GRC process.							
2007 Total	**0**	**1,433**	**0**	**0.0**			
2008	0	3,049	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3080239373
Adjustment necessary to reflect charging of precharge fittings as 100% O&M. Capital reassignments will then be handled in the RO model as per usual GRC process.							
2008 Total	**0**	**3,049**	**0**	**0.0**			
2009	0	2,444	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3080447767
Adjustment necessary to reflect charging of precharge fittings as 100% O&M. Capital reassignments will then be handled in the RO model as per usual GRC process.							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Field Operations & Maintenance
Category-Sub: 8. Tools, Fittings & Materials
Workpaper: 2GD000.005 - Pipeline O&M-Tools, Fittings & Materials

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2009	-996	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050 3084657157
	Adjustment necessary to reflect the union retroactive wage increase in the appropriate work groups to which the labor charges would have been posted under normal circumstances. Corresponding adjustments are shown in Pipeline O&M, Leak Survey, Locate & Mark, Main Mtce, Service Mtce, and Cathodic Protection.						
2009 Total	**-996**	**2,444**	**0**	**0.0**			

Supplemental Workpapers for Workpaper 2GD000.005

Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for incremental costs related to new Safety Requirement

There is a new Cal/OSHA requirement for safety traffic vests as result of a revised ANSI (107-2004) standard that requires high visibility garments be made to different specifications. This new standard, adopted by Cal/OSHA, DOT and CalTrans, requires more square inches of background material as well as additional square inches of reflective material. The calculation of the incremental costs to purchase these new vests is shown below.

Workgroups affected: **Tools, Fittings, Materials**

Methodology: **The cost for additional non labor was calculated as follows:**

Non-Labor
Number of safety vests purchased annually x the incremental cost per vest.

Assumptions:

[A]: Number of safety vests purchased annually per SCG Supply Management

[B]: Incremental cost per SCG Safety Department (new cost per vest---$27.50, minus current cost per vest---$15.23).

		[A]	[B]	[AxB]			
Line #	**Non Labor**	Total Vests per Year	Annual Cost per Vest	Total Cost per Year	**2010**	**2011**	**2012**
1	New safety vests	2,700	12.27	$ 33,129	**$ 33,129**	**$ 33,129**	**$ 33,129**

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Workpaper: VARIOUS

Summary for Category: B. Asset Management

	In 2009$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2009	2010	2011	2012
Labor	11,019	10,762	11,070	11,108
Non-Labor	2,948	3,082	3,082	3,082
NSE	0	0	0	0
Total	13,967	13,844	14,152	14,190
FTE	156.8	155.3	158.8	159.3

Workpapers belonging to this Category:

2GD001.000 Pipeline O&M -- Planning

Labor	6,174	6,174	6,482	6,520
Non-Labor	603	603	603	603
NSE	0	0	0	0
Total	6,777	6,777	7,085	7,123
FTE	91.3	91.3	94.8	95.3

2GD003.000 Cathodic Protection

Labor	4,845	4,588	4,588	4,588
Non-Labor	2,345	2,479	2,479	2,479
NSE	0	0	0	0
Total	7,190	7,067	7,067	7,067
FTE	65.5	64.0	64.0	64.0

Beginning of Workpaper
2GD001.000 - Pipeline O&M -- Planning

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub 1. Pipeline O&M Planning
Workpaper: 2GD001.000 - Pipeline O&M -- Planning

Activity Description:

This workgroup records the labor and non-labor costs for technical and administrative services needed for the successful and timely completion of the field operations and maintenance activities. Activities completed within this workgroup included items such as: identifying construction design requirements, evaluating pressure specifications, coordinating pipeline planning, providing project drawings, identifying material selection, preparing work order estimates, acquire third party contract services (e.g. paving, traffic control plan,, and operated equipment), and obtaining permits for construction from city, county, state and federal agencies.

Forecast Methodology:

Labor - Base YR Rec

2009 base year forecasting was chosen for this work group in order to maintain the level of services offered today and remain consistent with the projected field operations. To the base year spending, incremental costs are forecasted as the result of challenges faced in continuing to meet environmental regulations.

Non-Labor - Base YR Rec

2009 base year forecasting was chosen for this work group in order to maintain the level of services offered today and remain consistent with the projected field operations.

NSE - Base YR Rec

Not applicable to this workgroup.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	5,376	5,541	5,882	5,912	6,174	6,174	6,482	6,520
Non-Labor	933	813	1,118	656	603	603	603	603
NSE	0	0	0	0	0	0	0	0
Total	6,309	6,354	7,000	6,568	6,777	6,777	7,085	7,123
FTE	83.9	85.9	90.3	91.1	91.3	91.3	94.8	95.3

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 1. Pipeline O&M Planning
Workpaper: 2GD001.000 - Pipeline O&M -- Planning

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	Base YR Rec	6,174	6,174	6,174	0	308	346	6,174	6,482	6,520
Non-Labor	Base YR Rec	603	603	603	0	0	0	603	603	603
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		6,777	6,777	6,777	0	308	346	6,777	7,085	7,123
FTE	Base YR Rec	91.3	91.3	91.3	0.0	3.5	4.0	91.3	94.8	95.3

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010 Total	**0**	**0**	**0**	**0**	**0.0**	
2011	38	0	0	38	0.0	1-Sided Adj
Incrermental FTE required to aid in the compliance monitoring, recordkeeping and reporting of Green House Gas Emission requirements. Additional FTE will be added part in 2011 and the remainder in 2012. FTE calculated at annual salary of $76,000 (.5 FTE x $76,000)						
2011	0	0	0	0	0.5	1-Sided Adj
Incrermental FTE required to aid in the compliance monitoring, recordkeeping and reporting of Green House Gas Emission requirements. Additional FTE will be added part in 2011 and the remainder in 2012.						
2011	270	0	0	270	0.0	1-Sided Adj
Incremetnal addition of three FTEs to the Environmental group to help with proper review and management of compliance for storm water run off. Each FTE calculated at $90,000 each (3 FTEs x $90,000)						
2011	0	0	0	0	3.0	1-Sided Adj
Incremetnal addition of three FTEs to the Environmental group to help with proper review and management of compliance for storm water run off						
2011 Total	**308**	**0**	**0**	**308**	**3.5**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 1. Pipeline O&M Planning
Workpaper: 2GD001.000 - Pipeline O&M -- Planning

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
2012	270	0	0	270	0.0	1-Sided Adj
	Incremetnal addition of three FTEs to the Environmental group to help with proper review and management of compliance for storm water run off. Each FTE calculated at $90,000 each (3 FTEs x $90,000)					
2012	0	0	0	0	3.0	1-Sided Adj
	Incremetnal addition of three FTEs to the Environmental group to help with proper review and management of compliance for storm water run off					
2012	76	0	0	76	0.0	1-Sided Adj
	Incrermental FTE required to aid in the compliance monitoring, recordkeeping and reporting of Green House Gas Emission requirements. Additional FTE will be added part in 2011 and the remainder in 2012. FTE calculated at annual salary of $76,000 (.5 FTE x $76,000)					
2012	0	0	0	0	1.0	1-Sided Adj
	Incrermental FTE required to aid in the compliance monitoring, recordkeeping and reporting of Green House Gas Emission requirements. Additional FTE will be added part in 2011 and the remainder in 2012.					
2012 Total	**346**	**0**	**0**	**346**	**4.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 1. Pipeline O&M Planning
Workpaper: 2GD001.000 - Pipeline O&M -- Planning

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	4,028	4,134	4,606	4,668	5,040
Non-Labor	831	697	997	588	603
NSE	0	0	0	0	0
Total	4,859	4,832	5,603	5,256	5,644
FTE	70.2	70.0	74.7	73.9	74.3
Adjustments (Nominal $) **					
Labor	75	186	120	167	189
Non-Labor	0	53	70	70	0
NSE	0	0	0	0	0
Total	75	239	189	236	189
FTE	0.9	2.6	1.7	2.2	2.5
Recorded-Adjusted (Nominal $)					
Labor	4,103	4,320	4,726	4,834	5,229
Non-Labor	831	751	1,067	658	603
NSE	0	0	0	0	0
Total	4,934	5,071	5,793	5,492	5,833
FTE	71.1	72.6	76.4	76.1	76.8
Vacation & Sick (Nominal $)					
Labor	700	772	825	932	945
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	700	772	825	932	945
FTE	12.8	13.3	13.9	15.0	14.5
Escalation to 2009$					
Labor	574	449	332	146	0
Non-Labor	102	62	51	-2	0
NSE	0	0	0	0	0
Total	676	511	383	144	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	5,376	5,541	5,882	5,912	6,174
Non-Labor	933	813	1,118	656	603
NSE	0	0	0	0	0
Total	6,309	6,354	7,000	6,568	6,777
FTE	83.9	85.9	90.3	91.1	91.3

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 1. Pipeline O&M Planning
Workpaper: 2GD001.000 - Pipeline O&M -- Planning

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	75	186	120	167	189
Non-Labor	0	53	70	70	0
NSE	0	0	0	0	0
Total	75	239	189	236	189
FTE	0.9	2.6	1.7	2.2	2.5

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj_Type	From CCtr	RefID
2005	48	0	0	0.0	CCTR Transf	From 2200-0603.000	TPKSV20091027 124305903

Transfer of ST Management labor for environmental positions from 2200-0603 Pac Coast TSM to 2200-0537 Pac Coast Environmental. The transfer will bring together consistent charging for all years of Environmental group.

2005	0	0	0	0.5	CCTR Transf	From 2200-0603.000	TPKSV20091027 124506577

Transfer of ST Management FTEs for environmental positions from 2200-0603 Pac Coast TSM to 2200-0537 Pac Coast Environmental. The transfer will bring together consistent charging for all years of Environmental group.

2005	27	0	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 140322847

Transfer of ST Management labor for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.

2005	0	0	0	0.4	CCTR Transf	From 2200-0480.000	TPKSV20091028 141202763

Transfer of ST Management FTEs for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.

2005 Total	**75**	**0**	**0**	**0.9**

2006	110	0	0	0.0	CCTR Transf	From 2200-0603.000	TPKSV20091027 124657970

Transfer of ST Management labor for environmental positions from 2200-0603 Pac Coast TSM to 2200-0537 Pac Coast Environmental. The transfer will bring together consistent charging for all years of Environmental group.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 1. Pipeline O&M Planning
Workpaper: 2GD001.000 - Pipeline O&M -- Planning

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2006	0	0	0	1.5	CCTR Transf	From 2200-0603.000	TPKSV20091027 124747423
Transfer of ST Management FTEs for environmental positions from 2200-0603 Pac Coast TSM to 2200-0537 Pac Coast Environmental. The transfer will bring together consistent charging for all years of Environmental group.							
2006	0	10	0	0.0	CCTR Transf	From 2200-0603.000	TPKSV20091028 133751490
Transfer permits costs (CE 6280001) to correspond with the transfer of Evnironmental Labor. From 2200-0603 to 2200-0537							
2006	23	0	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028 134520733
Transfer of ST Management labor for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2006	0	0	0	0.3	CCTR Transf	From 2200-0433.000	TPKSV20091028 135513853
Transfer of ST Management FTEs for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group							
2006	0	20	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028 140013907
Transfer permits costs (CE 6280001) to correspond with the transfer of Environmental Labor. From 2200-0433 to 2200-0438							
2006	53	0	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 140423207
Transfer of ST Management labor for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2006	0	0	0	0.8	CCTR Transf	From 2200-0480.000	TPKSV20091028 141120700
Transfer of ST Management FTEs for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2006	0	24	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 141318983
Transfer permits costs (CE 6280001 and 6405012) to correspond with the transfer of Environmental Labor. From 2200-0480 to 2200-0485							
2006 Total	**186**	**53**	**0**	**2.6**			

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 1. Pipeline O&M Planning
Workpaper: 2GD001.000 - Pipeline O&M -- Planning

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2007	25	0	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028 134722843
Transfer of ST Management labor for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2007	0	0	0	0.3	CCTR Transf	From 2200-0433.000	TPKSV20091028 135423570
Transfer of ST Management FTEs for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group							
2007	0	31	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028 140100610
Transfer permits costs (CE 6280001) to correspond with the transfer of Environmental Labor. From 2200-0433 to 2200-0438							
2007	95	0	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 140520177
Transfer of ST Management labor for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2007	0	0	0	1.4	CCTR Transf	From 2200-0480.000	TPKSV20091028 141031810
Transfer of ST Management FTEs for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2007	0	39	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 141415593
Transfer permits costs (CE 6280001 and 6405012) to correspond with the transfer of Environmental Labor. From 2200-0480 to 2200-0485							
2007 Total	**120**	**70**	**0**	**1.7**			
2008	62	0	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028 134830860
Transfer of ST Management labor for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2008	0	0	0	0.8	CCTR Transf	From 2200-0433.000	TPKSV20091028 135240693
Transfer of ST Management FTEs for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 1. Pipeline O&M Planning
Workpaper: 2GD001.000 - Pipeline O&M -- Planning

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2008	0	21	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028 140146440
Transfer permits costs (CE 6280001) to correspond with the transfer of Environmental Labor. From 2200-0433 to 2200-0438							
2008	105	0	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 140612380
Transfer of ST Management labor for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2008	0	0	0	1.4	CCTR Transf	From 2200-0480.000	TPKSV20091028 140944590
Transfer of ST Management FTEs for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2008	0	49	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 141503157
Transfer permits costs (CE 6280001 and 6405012) to correspond with the transfer of Environmental Labor. From 2200-0480 to 2200-0485							
2008 Total	**167**	**70**	**0**	**2.2**			
2009	78	0	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20100211 093528903
Transfer South Inland Enviromental costs from TSM to Pipeline O&M - Planning Work Group							
2009	0	0	0	1.0	CCTR Transf	From 2200-0433.000	TPKSV20100211 093637670
Transfer South Inland Enviromental costs from TSM to Pipeline O&M - Planning Work Group							
2009	111	0	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20100211 093841907
Transfer Northern Enviromental costs from TSM to Pipeline O&M - Planning Work Group							
2009	0	0	0	1.5	CCTR Transf	From 2200-0480.000	TPKSV20100211 093917520
Transfer Northern Enviromental costs from TSM to Pipeline O&M - Planning Work Group							
2009 Total	**189**	**0**	**0**	**2.5**			

Beginning of Workpaper
2GD003.000 - Cathodic Protection

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub 2. Cathodic Protection
Workpaper: 2GD003.000 - Cathodic Protection

Activity Description:

Recorded to this work group are the labor and non-labor costs for evaluation and maintenance activities of SCG's cathodically protected distribution pipeline system. This work includes activities to remain in compliance with CFR 49 CFR 192.465, such as checking rectifiers, identifying location of interface bonds, evaluation of "short circuits", identifying locations for installation of anode points, and taking pipe-to-soil reads.

Forecast Methodology:

Labor - 5-YR Average

Over the period reviewed, labor spending has only varied on average 1.5% per year for this category. The 2005 – 2009 average was selected as representative of TY 2012 requirements due to the limited historical variation in these services, even in light of changes in the pipeline CP system and operations..

Non-Labor - 5-YR Average

Over the period reviewed, labor spending has only varied on average 0.3% per year for this category. The 2005 – 2009 average was selected as representative of TY 2012 requirements due to the limited historical variation in these services, even in light of changes in the pipeline CP system and operations.

NSE - 5-YR Average

Not applicable to this workgroup

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	4,591	4,305	4,447	4,752	4,845	4,588	4,588	4,588
Non-Labor	2,385	2,855	2,426	2,384	2,345	2,479	2,479	2,479
NSE	0	0	0	0	0	0	0	0
Total	6,976	7,160	6,873	7,136	7,190	7,067	7,067	7,067
FTE	64.9	61.1	61.9	66.7	65.5	64.0	64.0	64.0

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 2. Cathodic Protection
Workpaper: 2GD003.000 - Cathodic Protection

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	5-YR Average	4,588	4,588	4,588	0	0	0	4,588	4,588	4,588
Non-Labor	5-YR Average	2,479	2,479	2,479	0	0	0	2,479	2,479	2,479
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
Total		7,067	7,067	7,067	0	0	0	7,067	7,067	7,067
FTE	5-YR Average	64.0	64.0	64.0	0.0	0.0	0.0	64.0	64.0	64.0

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010 Total	**0**	**0**	**0**	**0**	**0.0**	
2011 Total	**0**	**0**	**0**	**0**	**0.0**	
2012 Total	**0**	**0**	**0**	**0**	**0.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 2. Cathodic Protection
Workpaper: 2GD003.000 - Cathodic Protection

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	3,504	3,357	3,573	3,886	4,103
Non-Labor	2,125	2,636	2,315	2,390	2,345
NSE	0	0	0	0	0
Total	5,628	5,992	5,887	6,276	6,448
FTE	55.0	51.6	52.4	55.7	55.1
Adjustments (Nominal $) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	3,504	3,357	3,573	3,886	4,103
Non-Labor	2,125	2,636	2,315	2,390	2,345
NSE	0	0	0	0	0
Total	5,628	5,992	5,887	6,276	6,448
FTE	55.0	51.6	52.4	55.7	55.1
Vacation & Sick (Nominal $)					
Labor	597	600	623	749	741
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	597	600	623	749	741
FTE	9.9	9.5	9.5	11.0	10.4
Escalation to 2009$					
Labor	490	349	251	117	0
Non-Labor	261	219	111	-6	0
NSE	0	0	0	0	0
Total	751	568	362	111	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	4,591	4,305	4,447	4,752	4,845
Non-Labor	2,385	2,855	2,426	2,384	2,345
NSE	0	0	0	0	0
Total	6,976	7,160	6,873	7,137	7,189
FTE	64.9	61.1	61.9	66.7	65.5

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Asset Management
Category-Sub: 2. Cathodic Protection
Workpaper: 2GD003.000 - Cathodic Protection

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj_Type	From CCtr	RefID
2005 Total	**0**	**0**	**0**	**0.0**			
2006 Total	**0**	**0**	**0**	**0.0**			
2007 Total	**0**	**0**	**0**	**0.0**			
2008 Total	**0**	**0**	**0**	**0.0**			
2009 Total	**0**	**0**	**0**	**0.0**			

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Workpaper: 2GD004.000

Summary for Category: C. Operations Management & Training

	In 2009$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2009	2010	2011	2012
Labor	5,585	5,798	7,577	8,425
Non-Labor	2,187	3,028	3,154	3,726
NSE	0	0	0	0
Total	7,772	8,826	10,731	12,151
FTE	62.8	64.8	87.1	96.3

Workpapers belonging to this Category:

2GD004.000 Operations Management & Training

Labor	5,585	5,798	7,577	8,425
Non-Labor	2,187	3,028	3,154	3,726
NSE	0	0	0	0
Total	7,772	8,826	10,731	12,151
FTE	62.8	64.8	87.1	96.3

Beginning of Workpaper
2GD004.000 - Operations Management & Training

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Activity Description:

Recorded to this workgroup are the salaries for leadership, field management, operations support, and training personnel. Also recorded to the workgroup are non-labor expenses associated with training, office supplies, and communication devices.

Forecast Methodology:

Labor - Base YR Rec

For labor costs, the 2009 Base most accurately represents the base level of leadership, management, support, and training personnel necessary to maintain current operations. To this foundation, additional support services will need to be added to meet future business challenges in this workgroup. Each of these additions is listed separately in this workpaper.

Non-Labor - 5-YR Average

The services provided by employees within this workgroup fluctuate from year-to-year. For this reason, a historical 5-year average of the recorded non-labor expenditures for the years 2005 through 2009 was determined to be most representative ongoing non-labor requirements. To this foundation, additional expenditures are necessary to meet the projected future training needs of this workgroup. Each of these adjustments is listed separately in this workpaper.

NSE - Base YR Rec

Not applicable to this workgroup.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	5,670	6,421	5,364	5,017	5,585	5,798	7,577	8,425
Non-Labor	2,409	2,862	2,410	2,224	2,187	3,028	3,154	3,726
NSE	0	0	0	0	0	0	0	0
Total	8,079	9,283	7,774	7,241	7,772	8,826	10,731	12,151
FTE	63.4	74.1	62.3	56.7	62.8	64.8	87.1	96.3

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	Base YR Rec	5,585	5,585	5,585	213	1,992	2,840	5,798	7,577	8,425
Non-Labor	5-YR Average	2,418	2,418	2,418	610	736	1,308	3,028	3,154	3,726
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		8,003	8,003	8,003	823	2,728	4,148	8,826	10,731	12,151
FTE	Base YR Rec	62.8	62.8	62.8	2.0	24.3	33.5	64.8	87.1	96.3

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010	21	0	0	21	0.0	1-Sided Adj
Full Year Effect of Hiring Technical Services Administrative Assistant in October 2009 (1 FTE * $50,000 * 55% O&M * 9 Months / 12 Months = $21,000)						
2010	0	0	0	0	0.4	1-Sided Adj
Full Year Effect of Hiring Technical Services Administrative Assistant in October 2009 (1 FTE * 55%O&M * 9 Months / 12 Months = 0.4 FTE)						
2010	0	62	0	62	0.0	1-Sided Adj
Educational Aids and Equipment for Field Technical Skills Training ($186,000 Total for Educational Aids & Equipment Cost / 3 Years = $62,000 per Year)						
2010	72	0	0	72	0.0	1-Sided Adj
New Technical Services Field Manager ($130,000 Salary * 55% O&M = $72,000)						
2010	0	0	0	0	0.6	1-Sided Adj
New Technical Services Field Manager (1 FTE * 55% O&M = 0.6 FTE)						
2010	0	536	0	536	0.0	1-Sided Adj
Instructional Design ([300 Training Modules to Maintain per Year * 12 Hours Each] + [30 Operator Qualification Documents to Maintain per Year * 8 Hours Each] + [110 Written Tests to Maintain per Year * 4 Hours Each] + [9 New Training Modules to Develop per Year * 120 Hours Each] = 5360 Hours per Year. 5360 Hours * $100 / Hour for Contract Employee = $536,000 per Year.)						
2010	120	0	0	120	0.0	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
Gas Operations Services - Support of New Technologies: Addition of $120,000 Labor, $12,000 Non-Labor, and 1 FTE in 2010. Please see supplemental workpaper for calculations.						
2010	0	12	0	12	0.0	1-Sided Adj
Gas Operations Services - Support of New Technologies: Addition of $120,000 Labor, $12,000 Non-Labor, and 1 FTE in 2010. Please see supplemental workpaper for calculations.						
2010	0	0	0	0	1.0	1-Sided Adj
Gas Operations Services - Support of New Technologies: Addition of $120,000 Labor, $12,000 Non-Labor, and 1 FTE in 2010. Please see supplemental workpaper for calculations.						
2010 Total	**213**	**610**	**0**	**823**	**2.0**	
2011	390	0	0	390	0.0	1-Sided Adj
Engineering Rotation Program (6 FTEs * $65,000 = $390,000)						
2011	21	0	0	21	0.0	1-Sided Adj
Full Year Effect of Hiring Technical Services Administrative Assistant in October 2009 (1 FTE * $50,000 * 55% O&M * 9 Months / 12 Months = $21,000)						
2011	0	0	0	0	0.4	1-Sided Adj
Full Year Effect of Hiring Technical Services Administrative Assistant in October 2009 (1 FTE * 55%O&M * 9 Months / 12 Months = 0.4 FTE)						
2011	0	62	0	62	0.0	1-Sided Adj
Educational Aids and Equipment for Field Technical Skills Training ($186,000 Total for Educational Aids & Equipment Cost / 3 Years = $62,000 per Year)						
2011	72	0	0	72	0.0	1-Sided Adj
New Technical Services Field Manager ($130,000 Salary * 55% O&M = $72,000)						
2011	0	0	0	0	0.6	1-Sided Adj
New Technical Services Field Manager (1 FTE * 55% O&M = 0.6 FTE)						
2011	0	536	0	536	0.0	1-Sided Adj

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
Instructional Design ([300 Training Modules to Maintain per Year * 12 Hours Each] + [30 Operator Qualification Documents to Maintain per Year * 8 Hours Each] + [110 Written Tests to Maintain per Year * 4 Hours Each] + [9 New Training Modules to Develop per Year * 120 Hours Each] = 5360 Hours per Year. 5360 Hours * $100 / Hour for Contract Employee = $536,000 per Year.)						
2011	0	0	0	0	6.0	1-Sided Adj
Engineering Rotation Program (6 FTEs)						
2011	509	0	0	509	0.0	1-Sided Adj
Gas Operations Services – Traditional Support Resource Base: Addition of $509,000 Labor, 38,000 Non-Labor, and 5.3 FTEs in 2011. Please see supplemental workpaper for calculations.						
2011	0	38	0	38	0.0	1-Sided Adj
Gas Operations Services – Traditional Support Resource Base: Addition of $509,000 Labor, 38,000 Non-Labor, and 5.3 FTEs in 2011. Please see supplemental workpaper for calculations.						
2011	0	0	0	0	5.3	1-Sided Adj
Gas Operations Services – Traditional Support Resource Base: Addition of $509,000 Labor, 38,000 Non-Labor, and 5.3 FTEs in 2011. Please see supplemental workpaper for calculations.						
2011	1,000	0	0	1,000	0.0	1-Sided Adj
Gas Operations Services - Support of New Technologies: Addition of $1,000,000 Labor, $100,000 Non-Labor, and 12 FTEs in 2011. Please see supplemental workpaper for calculations.						
2011	0	100	0	100	0.0	1-Sided Adj
Gas Operations Services - Support of New Technologies: Addition of $1,000,000 Labor, $100,000 Non-Labor, and 12 FTEs in 2011. Please see supplemental workpaper for calculations.						
2011	0	0	0	0	12.0	1-Sided Adj
Gas Operations Services - Support of New Technologies: Addition of $1,000,000 Labor, $100,000 Non-Labor, and 12 FTEs in 2011. Please see supplemental workpaper for calculations.						
2011 Total	**1,992**	**736**	**0**	**2,728**	**24.3**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
2012	390	0	0	390	0.0	1-Sided Adj
Engineering Rotation Program (6 FTEs * $65,000 = $390,000)						
2012	0	0	0	0	6.0	1-Sided Adj
Engineering Rotation Program (6 FTEs)						
2012	21	0	0	21	0.0	1-Sided Adj
Full Year Effect of Hiring Technical Services Administrative Assistant in October 2009 (1 FTE * $50,000 * 55% O&M * 9 Months / 12 Months = $21,000)						
2012	0	0	0	0	0.4	1-Sided Adj
Full Year Effect of Hiring Technical Services Administrative Assistant in October 2009 (1 FTE * 55%O&M * 9 Months / 12 Months = 0.4 FTE)						
2012	0	62	0	62	0.0	1-Sided Adj
Educational Aids and Equipment for Field Technical Skills Training ($186,000 Total for Educational Aids & Equipment Cost / 3 Years = $62,000 per Year)						
2012	72	0	0	72	0.0	1-Sided Adj
New Technical Services Field Manager ($130,000 Salary * 55% O&M = $72,000)						
2012	0	0	0	0	0.6	1-Sided Adj
New Technical Services Field Manager (1 FTE * 55% O&M = 0.6 FTE)						
2012	0	536	0	536	0.0	1-Sided Adj
Instructional Design ([300 Training Modules to Maintain per Year * 12 Hours Each] + [30 Operator Qualification Documents to Maintain per Year * 8 Hours Each] + [110 Written Tests to Maintain per Year * 4 Hours Each] + [9 New Training Modules to Develop per Year * 120 Hours Each] = 5360 Hours per Year. 5360 Hours * $100 / Hour for Contract Employee = $536,000 per Year.)						
2012	0	500	0	500	0.0	1-Sided Adj
Video Embedded System Instruction (500 Videos * $4,000/Video / 4 Years to Complete = $500,000 per Year)						
2012	1,017	0	0	1,017	0.0	1-Sided Adj
Gas Operations Services – Traditional Support Resource Base: Addition of $1,017,000 Labor, 76,000 Non-Labor, and 10.5 FTEs in 2012. Please see supplemental workpaper for calculations.						

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj Type
2012	0	76	0	76	0.0	1-Sided Adj
Gas Operations Services – Traditional Support Resource Base: Addition of $1,017,000 Labor, 76,000 Non-Labor, and 10.5 FTEs in 2012. Please see supplemental workpaper for calculations.						
2012	0	0	0	0	10.5	1-Sided Adj
Gas Operations Services – Traditional Support Resource Base: Addition of $1,017,000 Labor, 76,000 Non-Labor, and 10.5 FTEs in 2012. Please see supplemental workpaper for calculations.						
2012	1,340	0	0	1,340	0.0	1-Sided Adj
Gas Operations Services - Support of New Technologies: Addition of $1,340,000 Labor, $134,000 Non-Labor, and 16 FTE in 2012. Please see supplemental workpaper for calculations.						
2012	0	134	0	134	0.0	1-Sided Adj
Gas Operations Services - Support of New Technologies: Addition of $1,340,000 Labor, $134,000 Non-Labor, and 16 FTE in 2012. Please see supplemental workpaper for calculations.						
2012	0	0	0	0	16.0	1-Sided Adj
Gas Operations Services - Support of New Technologies: Addition of $1,340,000 Labor, $134,000 Non-Labor, and 16 FTE in 2012. Please see supplemental workpaper for calculations.						
2012 Total	**2,840**	**1,308**	**0**	**4,148**	**33.5**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
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Workpaper: 2GD004.000 - Operations Management & Training

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	4,402	5,192	4,429	4,269	4,239
Non-Labor	2,173	686	288	1,340	1,532
NSE	0	0	0	0	0
Total	6,575	5,877	4,717	5,609	5,770
FTE	54.6	65.2	54.4	49.5	47.7
Adjustments (Nominal $) **					
Labor	-75	-186	-120	-167	491
Non-Labor	-27	1,956	2,012	890	655
NSE	0	0	0	0	0
Total	-102	1,771	1,892	723	1,146
FTE	-0.9	-2.6	-1.7	-2.2	5.1
Recorded-Adjusted (Nominal $)					
Labor	4,327	5,006	4,309	4,103	4,730
Non-Labor	2,146	2,642	2,300	2,229	2,187
NSE	0	0	0	0	0
Total	6,473	7,648	6,609	6,332	6,917
FTE	53.7	62.6	52.7	47.3	52.8
Vacation & Sick (Nominal $)					
Labor	738	895	752	791	855
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	738	895	752	791	855
FTE	9.7	11.5	9.6	9.4	10.0
Escalation to 2009$					
Labor	605	520	303	124	0
Non-Labor	263	220	111	-6	0
NSE	0	0	0	0	0
Total	868	740	413	118	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	5,670	6,421	5,364	5,017	5,585
Non-Labor	2,409	2,862	2,410	2,224	2,187
NSE	0	0	0	0	0
Total	8,079	9,282	7,774	7,241	7,771
FTE	63.4	74.1	62.3	56.7	62.8

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	-75	-186	-120	-167	491
Non-Labor	-27	1,956	2,012	890	655
NSE	0	0	0	0	0
Total	-102	1,771	1,892	723	1,146
FTE	-0.9	-2.6	-1.7	-2.2	5.1

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005	0	532	0	0.0	CCTR Transf	From 2200-2023.000	TP1CSK2009092 2082951780

Transferring costs for USA Fees to cost center where charges have occurred in most recent history and will continue to be paid from. (CC 2200-2092)

2005	0	-532	0	0.0	1-Sided Adj	N/A	TPKSV20091006 133716313

One sided adjustment to transfer USA fees to Pipeline O&M workgroup 2GD002.002, Locate and Mark. The transfer will combine both the USA fees and L&M expeditures into the same workgroup.

2005	0	532	0	0.0	1-Sided Adj	N/A	TPKSV20091015 115451997

One sided adjustment of credits for cash collected for main and service damages. This transfer will allow for the credits to be combined with the main and service expenditures into the same workgroup. Corresponding one-sided adjustment will be made to Pipeline O&M.

2005	-48	0	0	0.0	CCTR Transf	To 2200-0537.000	TPKSV20091027 124305903

Transfer of ST Management labor for environmental positions from 2200-0603 Pac Coast TSM to 2200-0537 Pac Coast Environmental. The transfer will bring together consistent charging for all years of Environmental group.

2005	0	0	0	-0.5	CCTR Transf	To 2200-0537.000	TPKSV20091027 124506577

Transfer of ST Management FTEs for environmental positions from 2200-0603 Pac Coast TSM to 2200-0537 Pac Coast Environmental. The transfer will bring together consistent charging for all years of Environmental group.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005	-27	0	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 140322847
Transfer of ST Management labor for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2005	0	0	0	-0.4	CCTR Transf	To 2200-0485.000	TPKSV20091028 141202763
Transfer of ST Management FTEs for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2005	0	-559	0	0.0	1-Sided Adj	N/A	TPKSV20100415 132615053
Historical Adjustment - Amount is for Intervener Compensation which is not part of the GRC proceeding cost basis.							
2005 Total	**-75**	**-27**	**0**	**-0.9**			
2006	0	-583	0	0.0	1-Sided Adj	N/A	TPKSV20091006 133822080
One sided adjustment to transfer USA fees to Pipeline O&M workgroup - Locate and Mark. The transfer will combine both the USA fees and L&M expeditures into the same workgroup							
2006	0	2,592	0	0.0	1-Sided Adj	N/A	TPKSV20091015 115636157
One sided adjustment of credits for cash collected for main and service damages. This transfer will allow for the credits to be combined with the main and service expenditures into the same workgroup. Corresponding one-sided adjustment will be made to Pipeline O&M.							
2006	-110	0	0	0.0	CCTR Transf	To 2200-0537.000	TPKSV20091027 124657970
Transfer of ST Management labor for environmental positions from 2200-0603 Pac Coast TSM to 2200-0537 Pac Coast Environmental. The transfer will bring together consistent charging for all years of Environmental group.							
2006	0	0	0	-1.5	CCTR Transf	To 2200-0537.000	TPKSV20091027 124747423
Transfer of ST Management FTEs for environmental positions from 2200-0603 Pac Coast TSM to 2200-0537 Pac Coast Environmental. The transfer will bring together consistent charging for all years of Environmental group.							
2006	0	-10	0	0.0	CCTR Transf	To 2200-0537.000	TPKSV20091028 133751490
Transfer permits costs (CE 6280001) to correspond with the transfer of Evnironmental Labor. From 2200-0603 to 2200-0537							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2006	-23	0	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20091028 134520733
	Transfer of ST Management labor for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.						
2006	0	0	0	-0.3	CCTR Transf	To 2200-0438.000	TPKSV20091028 135513853
	Transfer of ST Management FTEs for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group						
2006	0	-20	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20091028 140013907
	Transfer permits costs (CE 6280001) to correspond with the transfer of Environmental Labor. From 2200-0433 to 2200-0438						
2006	-53	0	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 140423207
	Transfer of ST Management labor for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.						
2006	0	0	0	-0.8	CCTR Transf	To 2200-0485.000	TPKSV20091028 141120700
	Transfer of ST Management FTEs for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.						
2006	0	-24	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 141318983
	Transfer permits costs (CE 6280001 and 6405012) to correspond with the transfer of Environmental Labor. From 2200-0480 to 2200-0485						
2006 Total	**-186**	**1,956**	**0**	**-2.6**			
2007	0	2,602	0	0.0	1-Sided Adj	N/A	TPKSV20091015 115752250
	One sided adjustment of credits for cash collected for main and service damages. This transfer will allow for the credits to be combined with the main and service expenditures into the same workgroup. Corresponding one-sided adjustment will be made to Pipeline O&M.						
2007	-25	0	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20091028 134722843
	Transfer of ST Management labor for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.						

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
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Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2007	0	0	0	-0.3	CCTR Transf	To 2200-0438.000	TPKSV20091028 135423570
Transfer of ST Management FTEs for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group							
2007	0	-31	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20091028 140100610
Transfer permits costs (CE 6280001) to correspond with the transfer of Environmental Labor. From 2200-0433 to 2200-0438							
2007	-95	0	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 140520177
Transfer of ST Management labor for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2007	0	0	0	-1.4	CCTR Transf	To 2200-0485.000	TPKSV20091028 141031810
Transfer of ST Management FTEs for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2007	0	-39	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 141415593
Transfer permits costs (CE 6280001 and 6405012) to correspond with the transfer of Environmental Labor. From 2200-0480 to 2200-0485							
2007	0	-520	0	0.0	1-Sided Adj	N/A	TPKSV20100521 122958800
One sided adjustment to transfer USA fees to Pipeline O&M workgroup - Locate and Mark. The transfer will combine both the USA fees and L&M expeditures into the same workgroup.							
2007 Total	**-120**	**2,012**	**0**	**-1.7**			
2008	0	-1,088	0	0.0	CCTR Transf	To 2200-0294.000	TPKSV20090911 105808620
VP cost center was initially used for tracking of costs incurred by Storage Operations for repair activities resulting from Firestorms. For GRC, costs are being moved to Storage Operations (NSS cost center 2200-0294) to align with other Storage Operations expenditures.							
2008	0	-608	0	0.0	1-Sided Adj	N/A	TPKSV20091006 134107880
One sided adjustment to transfer USA fees to Pipeline O&M workgroup - Locate and Mark. The transfer will combine both the USA fees and L&M expeditures into the same workgroup.							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2008	0	2,655	0	0.0	1-Sided Adj	N/A	TPKSV20091015 115855300
One sided adjustment of credits for cash collected for main and service damages. This transfer will allow for the credits to be combined with the main and service expenditures into the same workgroup. Corresponding one-sided adjustment will be made to Pipeline O&M.							
2008	-62	0	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20091028 134830860
Transfer of ST Management labor for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2008	0	0	0	-0.8	CCTR Transf	To 2200-0438.000	TPKSV20091028 135240693
Transfer of ST Management FTEs for environmental positions from 2200-0433 SI TSM to 2200-0438 SI Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group							
2008	0	-21	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20091028 140146440
Transfer permits costs (CE 6280001) to correspond with the transfer of Environmental Labor. From 2200-0433 to 2200-0438							
2008	-105	0	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 140612380
Transfer of ST Management labor for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2008	0	0	0	-1.4	CCTR Transf	To 2200-0485.000	TPKSV20091028 140944590
Transfer of ST Management FTEs for environmental positions from 2200-0480 NO TSM to 2200-0485 NO Reg Engineer. The transfer will bring together consistent placement of Environmental under Pipeline O&M - Planning Work group.							
2008	0	-49	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 141503157
Transfer permits costs (CE 6280001 and 6405012) to correspond with the transfer of Environmental Labor. From 2200-0480 to 2200-0485							
2008 Total	**-167**	**890**	**0**	**-2.2**			
2009	0	54	0	0.0	CCTR Transf	From 2200-2181.000	TERITRAN20100 616114206180
OpEx misc reimbursable transfer for Supervisor Enablement TAs.							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. Operations Management & Training
Category-Sub: 1. Operations Management & Training
Workpaper: 2GD004.000 - Operations Management & Training

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2009	680	0	0	0.0	CCTR Transf	From 2200-2181.000	TERITRAN20100616124129497
OpEx labor transfer for Supervisor Enablement TAs.							
2009	0	0	0	7.6	CCTR Transf	From 2200-2181.000	TERITRAN20100616125041600
OpEX FTE transfer for Supervisor Enablement TAs.							
2009	0	-366	0	0.0	1-Sided Adj	N/A	TPKSV20100211093220650
Transfer 2009 USA fees to Pipeline Operations & Maintenance - Locate & Mark							
2009	0	1,717	0	0.0	1-Sided Adj	N/A	TPKSV20100211093327450
Transfer 2009 Credits for Main and Service Damages to Pipeline Operations & Maintenance.							
2009	-78	0	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20100211093528903
Transfer South Inland Enviromental costs from TSM to Pipeline O&M - Planning Work Group							
2009	0	0	0	-1.0	CCTR Transf	To 2200-0438.000	TPKSV20100211093637670
Transfer South Inland Enviromental costs from TSM to Pipeline O&M - Planning Work Group							
2009	-111	0	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20100211093841907
Transfer Northern Enviromental costs from TSM to Pipeline O&M - Planning Work Group							
2009	0	0	0	-1.5	CCTR Transf	To 2200-0485.000	TPKSV20100211093917520
Transfer Northern Enviromental costs from TSM to Pipeline O&M - Planning Work Group							
2009	0	-749	0	0.0	CCTR Transf	To 2200-0294.000	TPKSV20100303085633223
VP cost center was initially used for tracking of costs incurred by Storage Operations for repair activities resulting from Firestorms. For GRC costs are being moved to Storage operations (NSS cost center 2200-0294) to align with other Storage operations expenditures.							
2009 Total	**491**	**655**	**0**	**5.1**			

Supplemental Workpapers for Workpaper 2GD004.000

Southern California Gas Company -- Gas Distribution -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for Incremental Costs and FTEs Related to Gas Operations Services - Traditional Support Resource Base

Line #	Description	Cost Center	2006 Labor	2006 Non-Labor	2006 FTEs	2009 Labor	2009 Non-Labor	2009 FTEs
1	NEW BUSINESS	2200-0615	$ -	$ 14,224	0.0	$ 122,884	$ 8,290	1.7
2	DART REPORTING - DISTRIBUTION	2200-0616	$ 160,874	$ 12,417	2.4	$ 19,883	$ 1,433	0.3
3	PROJECT MANAGERS	2200-0801	$ 610,520	$ 46,463	6.9	$ 168	$ 4,102	0.0
4	FIBRE IN GAS ADMIN COSTS & REVENUE	2200-2122	$ -	$ 27	0.0	$ 143	$ -	0.0
5	GAS TRANS & DISTR SERVICES DIR	2200-2144	$ 193,296	$ 23,556	2.0	$ 43,353	$ 14,618	0.4
6	**Total Recorded**		**$ 964,690**	**$ 96,687**	**11.3**	**$ 186,431**	**$ 28,443**	**2.4**
7	Vacation & Sick Time Factor		17.87%		18.32%	18.07%		18.91%
8	Escalation Factor		91.90%	92.32%		100.00%	100.00%	
9	**Total Adjusted Recorded (2009$ with V&S)**		**$ 1,237,302**	**$ 104,730**	**13.4**	**$ 220,119**	**$ 28,443**	**2.9**

	Decrease in FTEs & Dollars from 2006 to 2009:		2011 Increase*	2012 Increase
10	**Labor (Rounded to Nearest Thousand):**	**$ 1,017,000**	**$ 509,000**	**$ 1,017,000**
11	**Non-Labor (Rounded to Nearest Thousand):**	**$ 76,000**	**$ 38,000**	**$ 76,000**
12	**Total:**	**$ 1,093,000**	**$ 547,000**	**$ 1,093,000**
13	**FTEs:**	**10.5**	**5.3**	**10.5**

* Approximately one half of the employees will be added by 1/1/11, and the other half will be added by 1/1/12.

Updated 10/22/2010

Southern California Gas Company -- Gas Distribution -- Witness Gina Orozco-Mejia

Supplemental Workpaper Calculations for Incremental Costs and FTEs Related to Gas Operations Services - Support of New Technologies

Line #	Position	Salary per FTE (2009$)	Number of FTEs	FTE To Be Hired By:			FTEs Totals in Each Year			Dollar Totals in Each Year (2009$)		
				During 2010*	1/1/11	1/1/12	2010	2011	2012	2010	2011	2012
1	Managers	$120,000	2	2			1	2	2	$ 120,000	$ 240,000	$ 240,000
2	Project Managers	$100,000	3		2	1	0	2	3	$ -	$ 200,000	$ 300,000
3	Advisors	$ 80,000	3			3	0	0	3	$ -	$ -	$ 240,000
4	Analysts	$ 70,000	8		8		0	8	8	$ -	$ 560,000	$ 560,000
5	**Total Labor**		**16**	**2**	**10**	**4**	**1**	**12**	**16**	**$ 120,000**	**$ 1,000,000**	**$ 1,340,000**
6	**Total Non-Labor (10% of Labor)**									**$ 12,000**	**$ 100,000**	**$ 134,000**
7	**Total**		**16**	**2**	**10**	**4**	**1**	**12**	**16**	**$ 132,000**	**$ 1,100,000**	**$ 1,474,000**

* To approximate the employees being hired during 2010, half of the cost was added in 2010 and the other half was added in 2011.

Updated 10/29/2010

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: D. Regional Public Affairs
Workpaper: 2GD005.000

Summary for Category: D. Regional Public Affairs

	In 2009$ (000)			
	Adjusted-Recorded	Adjusted-Forecast		
	2009	2010	2011	2012
Labor	3,135	3,135	3,135	3,135
Non-Labor	772	772	772	772
NSE	0	0	0	0
Total	3,907	3,907	3,907	3,907
FTE	33.2	33.2	33.2	33.2

Workpapers belonging to this Category:

2GD005.000 Regional Public Affairs

Labor	3,135	3,135	3,135	3,135
Non-Labor	772	772	772	772
NSE	0	0	0	0
Total	3,907	3,907	3,907	3,907
FTE	33.2	33.2	33.2	33.2

Beginning of Workpaper
2GD005.000 - Regional Public Affairs

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: D. Regional Public Affairs
Category-Sub 1. Regional Public Affairs
Workpaper: 2GD005.000 - Regional Public Affairs

Activity Description:

Regional Public Affairs (RPA) primarily supports field operations through its work with regional and local governments on isssues regarding proposed regulations, franchises, permitting, and emergency preparedness and response. RPA also educates officials at the county and city levels about SoCalGas issues that could impact customers. RPA further serves as the point of contact in the communities SoCalGas serves, educating stakeholders about SoCalGas activities, programs and services, responding to customer and media inquiries, and resolving customer complaints.

Forecast Methodology:

Labor - Base YR Rec

Base year methodology is used as it best reflects current and future operating requirements.

Non-Labor - Base YR Rec

Base year methodology is used as it best reflects current and future operating requirements.

NSE - Base YR Rec

Not applicable to this work group.

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Labor	3,024	3,140	3,173	3,046	3,135	3,135	3,135	3,135
Non-Labor	1,288	1,226	720	685	772	772	772	772
NSE	0	0	0	0	0	0	0	0
Total	4,312	4,366	3,893	3,731	3,907	3,907	3,907	3,907
FTE	32.8	33.6	33.7	32.1	33.2	33.2	33.2	33.2

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: D. Regional Public Affairs
Category-Sub: 1. Regional Public Affairs
Workpaper: 2GD005.000 - Regional Public Affairs

Forecast Summary:

In 2009 $(000)										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	Base YR Rec	3,135	3,135	3,135	0	0	0	3,135	3,135	3,135
Non-Labor	Base YR Rec	772	772	772	0	0	0	772	772	772
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		3,907	3,907	3,907	0	0	0	3,907	3,907	3,907
FTE	Base YR Rec	33.2	33.2	33.2	0.0	0.0	0.0	33.2	33.2	33.2

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010 Total	**0**	**0**	**0**	**0**	**0.0**	
2011 Total	**0**	**0**	**0**	**0**	**0.0**	
2012 Total	**0**	**0**	**0**	**0**	**0.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: D. Regional Public Affairs
Category-Sub: 1. Regional Public Affairs
Workpaper: 2GD005.000 - Regional Public Affairs

Determination of Adjusted-Recorded:

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	2,308	2,448	2,549	2,490	2,655
Non-Labor	1,148	1,132	687	687	772
NSE	0	0	0	0	0
Total	3,456	3,580	3,236	3,178	3,427
FTE	27.8	28.4	28.5	26.8	27.9
Adjustments (Nominal $) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	2,308	2,448	2,549	2,490	2,655
Non-Labor	1,148	1,132	687	687	772
NSE	0	0	0	0	0
Total	3,456	3,580	3,236	3,178	3,427
FTE	27.8	28.4	28.5	26.8	27.9
Vacation & Sick (Nominal $)					
Labor	394	438	445	480	480
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	394	438	445	480	480
FTE	5.0	5.2	5.2	5.3	5.3
Escalation to 2009$					
Labor	323	254	179	75	0
Non-Labor	141	94	33	-2	0
NSE	0	0	0	0	0
Total	464	349	212	74	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	3,024	3,140	3,173	3,046	3,135
Non-Labor	1,288	1,226	720	685	772
NSE	0	0	0	0	0
Total	4,313	4,366	3,893	3,731	3,906
FTE	32.8	33.6	33.7	32.1	33.2

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: D. Regional Public Affairs
Category-Sub: 1. Regional Public Affairs
Workpaper: 2GD005.000 - Regional Public Affairs

Summary of Adjustments to Recorded:

	In Nominal $ (000)				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005 Total	**0**	**0**	**0**	**0.0**			
2006 Total	**0**	**0**	**0**	**0.0**			
2007 Total	**0**	**0**	**0**	**0.0**			
2008 Total	**0**	**0**	**0**	**0.0**			
2009 Total	**0**	**0**	**0**	**0.0**			

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina

Summary of Shared Services Workpapers:

	In 2009 $ (000) "Book Expense"			
	Adjusted-Recorded	Adjusted-Forecast		
Description	**2009**	**2010**	**2011**	**2012**
A. Operations Leadership	255	299	299	299
B. Operations Technical Support	602	593	593	593
C. USS Billed-In from SDG&E	264	263	263	263
Total	1,121	1,155	1,155	1,155

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Operations Leadership
Cost Center: 2200-0431.000

Summary for Category: A. Operations Leadership

	In 2009$ (000) "Book Expense"			
	Adjusted-Recorded	Adjusted-Forecast		
	2009	2010	2011	2012
Labor	225	225	225	225
Non-Labor	30	74	74	74
NSE	0	0	0	0
Total	255	299	299	299
FTE	1.2	1.2	1.2	1.2

Cost Centers belonging to this Category:

2200-0431.000 VP GAS TRANS & DISTR OPERATIONS

Labor	225	225	225	225
Non-Labor	30	74	74	74
NSE	0	0	0	0
Total	255	299	299	299
FTE	1.2	1.2	1.2	1.2

Beginning of Workpaper
2200-0431.000 - VP GAS TRANS & DISTR OPERATIONS

Area:	GAS DISTRIBUTION
Witness:	Orozco, Guillermina
Category:	A. Operations Leadership
Category-Sub	1. VP Gas Trans & Distr Operations
Cost Center:	2200-0431.000 - VP GAS TRANS & DISTR OPERATIONS

Activity Description:

Recorded to this cost center over time are the salary and employee non-labor expenses for the Vice President and their assistant for the gas field operations organization. Also charged are minimal one-time expenses that benefit the entire organization.

Forecast Methodology:

Labor - Base YR Rec

Due to changes in reporting relationships, the 2009 Base is the most accurate representation of labor services and funding required for the future. This cost center has been used to record the costs for services of the VP and their assistant. Historical variation in charges is due to the Company assignment of the employees holding the positions. Prior to 2009, reported costs represented the expenses of the administrative assistant who was a SCG employee (and the VP being a SDGE employee). Effective 2009, the Administrative position is held by an SDGE employee, and the VP is a SCG employee.

Non-Labor - 5-YR Average

The expected non-labor spending is anticipated to follow the 5-year average profile. The variation shown over time is representative of the variety of costs that are recorded to this leadership cost center (in support of the entire operations) -- e.g. fees for benchmark studies, or engineering review studies, travel for representation at industry conferences. 5-year average was choosen at the forecat methodology to best capture this the potential variation that could again occur over the GRC.

NSE - Base YR Rec

Not Applicable to this Cost Center

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Operations Leadership
Category-Sub 1. VP Gas Trans & Distr Operations
Cost Center: 2200-0431.000 - VP GAS TRANS & DISTR OPERATIONS

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
	Total Incurred (100% Level)							
Labor	64	65	130	244	263	263	263	263
Non-Labor	83	182	31	108	31	86	86	86
NSE	0	0	0	0	0	0	0	0
Total	147	247	161	352	294	349	349	349
FTE	0.9	0.9	2.0	1.1	1.2	1.2	1.2	1.2
	Allocations Out							
Labor	11	10	48	69	38	38	38	38
Non-Labor	15	30	6	29	1	12	12	12
NSE	0	0	0	0	0	0	0	0
Total	26	40	54	98	39	50	50	50
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Retained							
Labor	53	55	82	175	225	225	225	225
Non-Labor	68	152	25	79	30	74	74	74
NSE	0	0	0	0	0	0	0	0
Total	121	207	107	254	255	299	299	299
FTE	0.9	0.9	2.0	1.1	1.2	1.2	1.2	1.2
	Allocations In							
Labor	0	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Book Expense							
Labor	53	55	82	175	225	225	225	225
Non-Labor	68	152	25	79	30	74	74	74
NSE	0	0	0	0	0	0	0	0
Total	121	207	107	254	255	299	299	299
FTE	0.9	0.9	2.0	1.1	1.2	1.2	1.2	1.2

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Operations Leadership
Category-Sub: 1. VP Gas Trans & Distr Operations
Cost Center: 2200-0431.000 - VP GAS TRANS & DISTR OPERATIONS

Calculation of Book Expense:

	2009 Adjusted-Recorded					2010 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	24	0	24	0.00	0	4	0	4	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	263	7	0	270	1.20	263	82	0	345	1.20
% Allocation										
Retained	85.48%	85.48%				85.46%	85.46%			
SEU	14.52%	14.52%				14.54%	14.54%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			
$ Allocation										
Retained	225	6	0	231		225	70	0	295	
SEU	38	1	0	39		38	12	0	50	
CORP	0	0	0	0		0	0	0	0	
Unreg	0	0	0	0		0	0	0	0	
Total Incurred	**263**	**31**	**0**	**294**	**1.20**	**263**	**86**	**0**	**349**	**1.20**
Total Alloc. Out	**38**	**1**	**0**	**39**		**38**	**12**	**0**	**50**	
Total Retained	**225**	**30**	**0**	**255**		**225**	**74**	**0**	**299**	
Allocations In	**0**	**0**	**0**	**0**		**0**	**0**	**0**	**0**	
Book Expense	225	30	0	255		225	74	0	299	

	2011 Adjusted-Forecast					2012 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	4	0	4	0.00	0	4	0	4	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	263	82	0	345	1.20	263	82	0	345	1.20
% Allocation										
Retained	85.46%	85.46%				85.46%	85.46%			
SEU	14.54%	14.54%				14.54%	14.54%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			
$ Allocation										
Retained	225	70	0	295		225	70	0	295	
SEU	38	12	0	50		38	12	0	50	
CORP	0	0	0	0		0	0	0	0	
Unreg	0	0	0	0		0	0	0	0	
Total Incurred	**263**	**86**	**0**	**349**	**1.20**	**263**	**86**	**0**	**349**	**1.20**
Total Alloc. Out	**38**	**12**	**0**	**50**		**38**	**12**	**0**	**50**	
Total Retained	**225**	**74**	**0**	**299**		**225**	**74**	**0**	**299**	
Allocations In	**0**	**0**	**0**	**0**		**0**	**0**	**0**	**0**	
Book Expense	225	74	0	299		225	74	0	299	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Operations Leadership
Category-Sub: 1. VP Gas Trans & Distr Operations
Cost Center: 2200-0431.000 - VP GAS TRANS & DISTR OPERATIONS

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2009

The position charging this cost center provides leadership services in support of distribution field operations. In 2009 the billing allocation was based strictly on employee count as an approximation of how the VP Leadership services would benefit the organization. This allocation was simply the ratio of SCG and SDGE employees within the organization.

Cost Center Allocation Percentage for 2010

While the services provided under this cost center remained unchanged, the percent allocation has been modified to reflect the broader scope of responsibilities for this cost center. In April 2010 the oversight role included not only the distribution function, but also added the customer services function. The allocation method was modified to reflect oversight of services that benefit customers, the general management of the pipeline asset, and leadership to the entire employee base. These three factors are represented by the relative ratio of residential customers, miles of transmission and distribution main pipeline, and number of employees, are equally weighted to derive the overall allocation percentage.

Cost Center Allocation Percentage for 2011

The 2010 percentage allocation is assumed constant throughout the forecast period.

Cost Center Allocation Percentage for 2012

The 2010 percentage allocation is assumed constant throughout the forecast period.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Operations Leadership
Category-Sub: 1. VP Gas Trans & Distr Operations
Cost Center: 2200-0431.000 - VP GAS TRANS & DISTR OPERATIONS

Forecast Summary:

In 2009 $(000) "Incurred Costs"										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	Base YR Rec	263	263	263	0	0	0	263	263	263
Non-Labor	5-YR Average	86	86	86	0	0	0	86	86	86
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		349	349	349	0	0	0	349	349	349
FTE	Base YR Rec	1.2	1.2	1.2	0.0	0.0	0.0	1.2	1.2	1.2

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010 Total	**0**	**0**	**0**	**0**	**0.0**	
2011 Total	**0**	**0**	**0**	**0**	**0.0**	
2012 Total	**0**	**0**	**0**	**0**	**0.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Operations Leadership
Category-Sub: 1. VP Gas Trans & Distr Operations
Cost Center: 2200-0431.000 - VP GAS TRANS & DISTR OPERATIONS

Determination of Adjusted-Recorded (Incurred Costs):

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	49	51	104	201	223
Non-Labor	73	168	29	213	84
NSE	0	0	0	0	0
Total	121	219	134	415	307
FTE	0.8	0.8	1.7	0.9	1.0
Adjustments (Nominal $) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	-107	-54
NSE	0	0	0	0	0
Total	0	0	0	-107	-54
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	49	51	104	201	223
Non-Labor	73	168	29	106	30
NSE	0	0	0	0	0
Total	121	219	134	308	253
FTE	0.8	0.8	1.7	0.9	1.0
Vacation & Sick (Nominal $)					
Labor	8	9	18	39	40
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	8	9	18	39	40
FTE	0.1	0.1	0.3	0.2	0.2
Escalation to 2009$					
Labor	7	5	7	4	0
Non-Labor	9	15	2	2	0
NSE	0	0	0	0	0
Total	16	20	9	5	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	64	65	129	244	263
Non-Labor	82	183	31	108	30
NSE	0	0	0	0	0
Total	146	248	160	352	293
FTE	0.9	0.9	2.0	1.1	1.2

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Operations Leadership
Category-Sub: 1. VP Gas Trans & Distr Operations
Cost Center: 2200-0431.000 - VP GAS TRANS & DISTR OPERATIONS

Summary of Adjustments to Recorded:

	In Nominal $ (000) "Incurred Costs"				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	0	0	0	0	0
Non-Labor	0	0	0	-107	-54
NSE	0	0	0	0	0
Total	0	0	0	-107	-54
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2005 Total	**0**	**0**	**0**	**0.0**			
2006 Total	**0**	**0**	**0**	**0.0**			
2007 Total	**0**	**0**	**0**	**0.0**			
2008	0	-107	0	0.0	CCTR Transf	To 2200-0294.000	TP1CSK2009092 4075847077
VP cost center was initially used for tracking of costs incurred by Storage Operations for repair activities resulting from Firestorms. For GRC costs are being moved to Storage operations (NSS cost center 2200-0294) to align with other Storage operations expenditures.							
2008 Total	**0**	**-107**	**0**	**0.0**			
2009	0	-23	0	0.0	CCTR Transf	To 2200-0294.000	TP1CSK2010030 1144545890
VP cost center was initially used for tracking of costs incurred by Storage Operations for repair activities resulting from Firestorms. For GRC costs are being moved to Storage operations (NSS cost center 2200-0294) to align with other Storage operations expenditures.							

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Operations Leadership
Category-Sub: 1. VP Gas Trans & Distr Operations
Cost Center: 2200-0431.000 - VP GAS TRANS & DISTR OPERATIONS

Year/Expl.	Labor	NLbr	NSE	FTE	Adj Type	From CCtr	RefID
2009	0	-31	0	0.0	CCTR Transf	To 2200-0294.000	TP1CSK2010030 1144649890
VP cost center was initially used for tracking of costs incurred by Storage Operations for repair activities resulting from Firestorms. For GRC costs are being moved to Storage operations (NSS cost center 2200-0294) to align with other Storage operations expenditures.							
2009 Total	**0**	**-54**	**0**	**0.0**			

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Operations Technical Support
Cost Center: 2200-2023.000

Summary for Category: B. Operations Technical Support

	In 2009$ (000) "Book Expense"			
	Adjusted-Recorded	Adjusted-Forecast		
	2009	2010	2011	2012
Labor	533	536	536	536
Non-Labor	69	57	57	57
NSE	0	0	0	0
Total	602	593	593	593
FTE	5.9	5.9	5.9	5.9

Cost Centers belonging to this Category:
2200-2023.000 FIELD TECHNOLOGIES

Labor	533	536	536	536
Non-Labor	69	57	57	57
NSE	0	0	0	0
Total	602	593	593	593
FTE	5.9	5.9	5.9	5.9

Beginning of Workpaper
2200-2023.000 - FIELD TECHNOLOGIES

Area:	GAS DISTRIBUTION
Witness:	Orozco, Guillermina
Category:	B. Operations Technical Support
Category-Sub	1. Gas Field Technologies
Cost Center:	2200-2023.000 - FIELD TECHNOLOGIES

Activity Description:

Recorded to this cost center are the labor, employee expense and non-labor materials and services for an organization responsible for review and update of field operatoinal standards and practices; including the identifcation/testing of new tools or methods and support on accident investigation as it may relate to company procedures. Areas of expertise include location of pipeline, pressure contorls, general utility compliance procedures. Team supports eduction of field on practices.

Forecast Methodology:

Labor - Base YR Rec

The variation in labor is due to changes in reporting structure for various support operation as team members have transitioned to support development of OpEx tools. Employees reporting relationships have been consolidated to this cost center for supervisory support and optimization of resources management. Due to these organizational change, the 2009 Base is the most accurate reprentation of labor services and funding requirement for the future.

Non-Labor - 5-YR Average

Non-labor spending is anticipated to follow the 5-year average profile. This adequately represents the underlying fluctuation in non-labor spending for this cost center that may occur over time.

NSE - Base YR Rec

Not applicable to this cost center.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Operations Technical Support
Category-Sub 1. Gas Field Technologies
Cost Center: 2200-2023.000 - FIELD TECHNOLOGIES

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
	Total Incurred (100% Level)							
Labor	229	249	337	490	552	552	552	552
Non-Labor	60	49	21	97	71	59	59	59
NSE	0	0	0	0	0	0	0	0
Total	289	298	358	587	623	611	611	611
FTE	2.5	2.8	3.8	5.4	5.9	5.9	5.9	5.9
	Allocations Out							
Labor	26	22	41	19	19	16	16	16
Non-Labor	-2	4	2	4	2	2	2	2
NSE	0	0	0	0	0	0	0	0
Total	24	26	43	23	21	18	18	18
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Retained							
Labor	203	227	296	471	533	536	536	536
Non-Labor	62	45	19	93	69	57	57	57
NSE	0	0	0	0	0	0	0	0
Total	265	272	315	564	602	593	593	593
FTE	2.5	2.8	3.8	5.4	5.9	5.9	5.9	5.9
	Allocations In							
Labor	0	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Book Expense							
Labor	203	227	296	471	533	536	536	536
Non-Labor	62	45	19	93	69	57	57	57
NSE	0	0	0	0	0	0	0	0
Total	265	272	315	564	602	593	593	593
FTE	2.5	2.8	3.8	5.4	5.9	5.9	5.9	5.9

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Operations Technical Support
Category-Sub: 1. Gas Field Technologies
Cost Center: 2200-2023.000 - FIELD TECHNOLOGIES

Calculation of Book Expense:

	2009 Adjusted-Recorded					2010 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	1	1	0	2	0.00	1	0	0	1	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	551	70	0	621	5.90	551	59	0	610	5.90
% Allocation										
Retained	96.62%	96.63%				97.14%	97.14%			
SEU	3.38%	3.37%				2.86%	2.86%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			
$ Allocation										
Retained	532	68	0	600		535	57	0	592	
SEU	19	2	0	21		16	2	0	18	
CORP	0	0	0	0		0	0	0	0	
Unreg	0	0	0	0		0	0	0	0	
Total Incurred	**552**	**71**	**0**	**623**	**5.90**	**552**	**59**	**0**	**611**	**5.90**
Total Alloc. Out	**19**	**2**	**0**	**21**		**16**	**2**	**0**	**18**	
Total Retained	**533**	**69**	**0**	**602**		**536**	**57**	**0**	**593**	
Allocations In	**0**	**0**	**0**	**0**		**0**	**0**	**0**	**0**	
Book Expense	533	69	0	602		536	57	0	593	

	2011 Adjusted-Forecast					2012 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	1	0	0	1	0.00	1	0	0	1	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	551	59	0	610	5.90	551	59	0	610	5.90
% Allocation										
Retained	97.14%	97.14%				97.14%	97.14%			
SEU	2.86%	2.86%				2.86%	2.86%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			
$ Allocation										
Retained	535	57	0	592		535	57	0	592	
SEU	16	2	0	18		16	2	0	18	
CORP	0	0	0	0		0	0	0	0	
Unreg	0	0	0	0		0	0	0	0	
Total Incurred	**552**	**59**	**0**	**611**	**5.90**	**552**	**59**	**0**	**611**	**5.90**
Total Alloc. Out	**16**	**2**	**0**	**18**		**16**	**2**	**0**	**18**	
Total Retained	**536**	**57**	**0**	**593**		**536**	**57**	**0**	**593**	
Allocations In	**0**	**0**	**0**	**0**		**0**	**0**	**0**	**0**	
Book Expense	536	57	0	593		536	57	0	593	

Area:	GAS DISTRIBUTION
Witness:	Orozco, Guillermina
Category:	B. Operations Technical Support
Category-Sub:	1. Gas Field Technologies
Cost Center:	2200-2023.000 - FIELD TECHNOLOGIES

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2009

Sharing of services from this cost center has been limited to the supervisors' time and their associated non-labor. All other costs recorded to this cost center are for the benefit of SCG exclusivly. Therefore the billing allocation has been established based on the ratio of SCG and SDGE employees within this workgroup as it applies to only the supervisory expenditures.

Cost Center Allocation Percentage for 2010

Sharing of services from this cost center has been limited to the supervisors' time and their associated non-labor. All other costs recorded to this cost center are for the benefit of SCG exclusivly. Therefore the billing allocation has been established based on the ratio of SCG and SDGE employees within this workgroup as it applies to only the supervisory expenditures.

Cost Center Allocation Percentage for 2011

Assume no change from 2010 allocations.

Cost Center Allocation Percentage for 2012

Assume no change from 2010 allocations.

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Operations Technical Support
Category-Sub: 1. Gas Field Technologies
Cost Center: 2200-2023.000 - FIELD TECHNOLOGIES

Forecast Summary:

In 2009 $(000) "Incurred Costs"										
Forecast Method		**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
		2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	Base YR Rec	552	552	552	0	0	0	552	552	552
Non-Labor	5-YR Average	59	59	59	0	0	0	59	59	59
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		611	611	611	0	0	0	611	611	611
FTE	Base YR Rec	5.9	5.9	5.9	0.0	0.0	0.0	5.9	5.9	5.9

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010 Total	**0**	**0**	**0**	**0**	**0.0**	
2011 Total	**0**	**0**	**0**	**0**	**0.0**	
2012 Total	**0**	**0**	**0**	**0**	**0.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Operations Technical Support
Category-Sub: 1. Gas Field Technologies
Cost Center: 2200-2023.000 - FIELD TECHNOLOGIES

Determination of Adjusted-Recorded (Incurred Costs):

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	174	194	271	405	467
Non-Labor	586	45	20	96	71
NSE	0	0	0	0	0
Total	760	239	291	501	539
FTE	2.1	2.4	3.2	4.5	5.0
Adjustments (Nominal $) **					
Labor	0	0	0	0	0
Non-Labor	-532	0	0	0	0
NSE	0	0	0	0	0
Total	-532	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	174	194	271	405	467
Non-Labor	54	45	20	96	71
NSE	0	0	0	0	0
Total	228	239	291	501	539
FTE	2.1	2.4	3.2	4.5	5.0
Vacation & Sick (Nominal $)					
Labor	30	35	47	78	84
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	30	35	47	78	84
FTE	0.4	0.4	0.6	0.9	0.9
Escalation to 2009$					
Labor	25	20	18	7	0
Non-Labor	7	4	1	1	0
NSE	0	0	0	0	0
Total	32	24	19	9	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	229	249	337	491	552
Non-Labor	60	49	21	97	71
NSE	0	0	0	0	0
Total	289	298	357	588	623
FTE	2.5	2.8	3.8	5.4	5.9

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: B. Operations Technical Support
Category-Sub: 1. Gas Field Technologies
Cost Center: 2200-2023.000 - FIELD TECHNOLOGIES

Summary of Adjustments to Recorded:

	In Nominal $ (000) "Incurred Costs"				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	0	0	0	0	0
Non-Labor	-532	0	0	0	0
NSE	0	0	0	0	0
Total	-532	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj_Type	From CCtr	RefID
2005	0	-532	0	0.0	CCTR Transf	To 2200-2092.000	TP1CSK2009092 2082951780
Transferring costs for USA Fees to cost center where charges have occurred in most recent history and will continue to be paid from. (CC 2200-2092)							
2005 Total	**0**	**-532**	**0**	**0.0**			
2006 Total	**0**	**0**	**0**	**0.0**			
2007 Total	**0**	**0**	**0**	**0.0**			
2008 Total	**0**	**0**	**0**	**0.0**			
2009 Total	**0**	**0**	**0**	**0.0**			

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. USS Billed-In from SDG&E
Cost Center: 2200-8921.000

Summary for Category: C. USS Billed-In from SDG&E

	In 2009$ (000) "Book Expense"			
	Adjusted-Recorded	Adjusted-Forecast		
	2009	2010	2011	2012
Labor	238	238	238	238
Non-Labor	26	25	25	25
NSE	0	0	0	0
Total	264	263	263	263
FTE	0.0	0.0	0.0	0.0

Cost Centers belonging to this Category:

2200-8921.000 Billed-in Cost Center for GAS DISTRIBUTION

Labor	238	238	238	238
Non-Labor	26	25	25	25
NSE	0	0	0	0
Total	264	263	263	263
FTE	0.0	0.0	0.0	0.0

Beginning of Workpaper
2200-8921.000 - Billed-in Cost Center for GAS DISTRIBUTION

Area:	GAS DISTRIBUTION
Witness:	Orozco, Guillermina
Category:	C. USS Billed-In from SDG&E
Category-Sub	1. USS Billed_to_CCTR for Gas Distribution
Cost Center:	2200-8921.000 - Billed-in Cost Center for GAS DISTRIBUTION

Activity Description:

This cost center was created for GRC to receive the billed-in costs for functional area - GAS DISTRIBUTION

Forecast Methodology:

N/A

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. USS Billed-In from SDG&E
Category-Sub 1. USS Billed_to_CCTR for Gas Distribution
Cost Center: 2200-8921.000 - Billed-in Cost Center for GAS DISTRIBUTION

Summary of Results:

	In 2009$ (000)							
	Adjusted-Recorded					Adjusted-Forecast		
Years	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
	Total Incurred (100% Level)							
Labor	0	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Allocations Out							
Labor	0	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Retained							
Labor	0	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Allocations In							
Labor	210	284	289	244	238	238	238	238
Non-Labor	29	24	14	33	26	25	25	25
NSE	0	0	0	0	0	0	0	0
Total	239	308	303	277	264	263	263	263
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Book Expense							
Labor	210	284	289	244	238	238	238	238
Non-Labor	29	24	14	33	26	25	25	25
NSE	0	0	0	0	0	0	0	0
Total	239	308	303	277	264	263	263	263
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. USS Billed-In from SDG&E
Category-Sub: 1. USS Billed_to_CCTR for Gas Distribution
Cost Center: 2200-8921.000 - Billed-in Cost Center for GAS DISTRIBUTION

Calculation of Book Expense:

	2009 Adjusted-Recorded					2010 Adjusted-Forecast				
	Labor	**Non-Labor**	**NSE**	**Total**	**FTE**	**Labor**	**Non-Labor**	**NSE**	**Total**	**FTE**
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	0	0	0	0	0.00	0	0	0	0	0.00
$ Allocation										
Retained	0	0	0	0		0	0	0	0	
SEU	0	0	0	0		0	0	0	0	
CORP	0	0	0	0		0	0	0	0	
Unreg	0	0	0	0		0	0	0	0	
Total Incurred	**0**	**0**	**0**	**0**	**0.00**	**0**	**0**	**0**	**0**	**0.00**
Total Retained	**0**	**0**	**0**	**0**		**0**	**0**	**0**	**0**	
Allocations In	**238**	**26**	**0**	**264**		**238**	**25**	**0**	**263**	
Book Expense	238	26	0	264		238	25	0	263	

	2011 Adjusted-Forecast					2012 Adjusted-Forecast				
	Labor	**Non-Labor**	**NSE**	**Total**	**FTE**	**Labor**	**Non-Labor**	**NSE**	**Total**	**FTE**
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
$ Allocation										
Retained	0	0	0	0		0	0	0	0	
SEU	0	0	0	0		0	0	0	0	
CORP	0	0	0	0		0	0	0	0	
Unreg	0	0	0	0		0	0	0	0	
Allocations In	**238**	**25**	**0**	**263**		**238**	**25**	**0**	**263**	
Book Expense	238	25	0	263		238	25	0	263	

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2009
N/A

Cost Center Allocation Percentage for 2010
N/A

Cost Center Allocation Percentage for 2011
N/A

Cost Center Allocation Percentage for 2012
N/A

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. USS Billed-In from SDG&E
Category-Sub: 1. USS Billed_to_CCTR for Gas Distribution
Cost Center: 2200-8921.000 - Billed-in Cost Center for GAS DISTRIBUTION

Forecast Summary:

In 2009 $(000) "Incurred Costs"									
Forecast Method	**Base Forecast**			**Forecast Adjustments**			**Adjusted-Forecast**		
	2010	**2011**	**2012**	**2010**	**2011**	**2012**	**2010**	**2011**	**2012**
Labor	0	0	0	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	0	0	0	0
NSE	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Forecast Adjustment Details:

Year/Expl.	Labor	NLbr	NSE	Total	FTE	Adj_Type
2010 Total	**0**	**0**	**0**	**0**	**0.0**	
2011 Total	**0**	**0**	**0**	**0**	**0.0**	
2012 Total	**0**	**0**	**0**	**0**	**0.0**	

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. USS Billed-In from SDG&E
Category-Sub: 1. USS Billed to CCTR for Gas Distribution
Cost Center: 2200-8921.000 - Billed-in Cost Center for GAS DISTRIBUTION

Determination of Adjusted-Recorded (Incurred Costs):

	2005 ($000)	2006 ($000)	2007 ($000)	2008 ($000)	2009 ($000)
Recorded (Nominal $)*					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal $) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal $)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Vacation & Sick (Nominal $)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Escalation to 2009$					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2009$)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

* After company-wide exclusions of Non-GRC costs
** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: C. USS Billed-In from SDG&E
Category-Sub: 1. USS Billed_to_CCTR for Gas Distribution
Cost Center: 2200-8921.000 - Billed-in Cost Center for GAS DISTRIBUTION

Summary of Adjustments to Recorded:

	In Nominal $ (000) "Incurred Costs"				
Year	**2005**	**2006**	**2007**	**2008**	**2009**
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year/Expl.	Labor	NLbr	NSE	FTE	Adj_Type	From CCtr	RefID
2005 Total	**0**	**0**	**0**	**0.0**			
2006 Total	**0**	**0**	**0**	**0.0**			
2007 Total	**0**	**0**	**0**	**0.0**			
2008 Total	**0**	**0**	**0**	**0.0**			
2009 Total	**0**	**0**	**0**	**0.0**			

Supplemental Workpapers for Workpaper 2200-8921.000

Southern California Gas Company
Test Year 2012 General Rate Case Application

Miscellaneous Supporting Material

To O&M Workpapers of Witness Gina Orozco-Mejia
Exhibit SCG-02-WP

Following are cross-reference sheets to assist in the validation between elements described in testimony and the work papers. A cross-reference sheet is provided for each Work Group (e.g. Locate and Mark) and each forecast adjustment within the work group (e.g. Federal Stimulus). There are a total of 9 cross-reference sheets covering Ms. Orozco-Mejia's entire testimony. In conjunction with these cross-reference sheets, work paper pages have been updated within this Application filing reflecting the new cross reference line items.

Southern California Gas Company
Test Year 2012 GRC
Non-Shared Services
2012 Forecast Adjustments for Locate & Mark (Shown in 2009 Dollars)
Testimony Pages: GOM-14 - GOM-17

Area: Gas Distribution
Witness: Gina Orozco-Mejia
Category: Field Operations and Maintenance
Workpaper: 2GD000.002

Description	Labor	Non-Labor	Total	FTE	Testimony Reference	Workpaper Reference
Federal Stimulus Funding	**$ 72,511**	**$ 10,260**	**$ 82,771**	**0.7**	GOM-16	Page 19, Lines 1 & 5
Los Osos City Sewer System					GOM-16	Pages 16 - 17
Depth Checks	$ 84,109	$ 11,731	$ 95,840	0.8		Page 17, Lines 1 & 6
Locating and Marking	$ 41,513	$ -	$ 41,513	0.4		Page 17, Lines 2 & 7
Job Observations	$ 43,101	$ -	$ 43,101	0.4		Page 17, Lines 3 & 8
Subtotal:	**$ 168,723**	**$ 11,731**	**$ 180,454**	**1.6**		
Removal of Paint Markings	**$ 209,467**	**$ 20,799**	**$ 230,266**	**2.0**	GOM-16 - GOM-17	Page 14, Line 1 & Page 15, Line 2
Increased City/Municipality Requirements					GOM-17	Pages 20 - 23
Night Work	$ 2,186	$ 25,645	$ 27,831	0.0		Page 21, Lines 4 & 8
Engineered Traffic Control Plan	$ 4,171	$ 17,395	$ 21,566	0.0		Page 21, Line 12 & Page 22, Line 16
Limits on Construction Hours	$ 3,003	$ 16,401	$ 19,404	0.0		Page 22, Lines 20 & 27
Increased Permit Fees and Construction Requirements	$ -	$ 72,820	$ 72,820	0.0		Page 23, Line 31
Increased Paving Requirements	$ -	$ 55,664	$ 55,664	0.0		Page 23, Line 35
Subtotal:	**$ 9,360**	**$ 187,925**	**$ 197,285**	**0.1**		
Grand Total:	**$ 460,061**	**$ 230,715**	**$ 690,776**	**4.4**		

SCG/GAS DISTRIBUTION/Exh No:SCG-02-WP/Witness: G. Orozco - 2200-8921.000_Supp1.pdf
Pages 210 of 234

Southern California Gas Company
Test Year 2012 GRC
Non-Shared Services
2012 Forecast Adjustments for Measurement and Regulation (Shown in 2009 Dollars)
Testimony Pages: GOM-18 - GOM-23

Area: Gas Distribution
Witness: Gina Orozco-Mejia
Category: Field Operations and Maintenance
Workpaper: 2GD002.000

Description	Labor	Non-Labor	Total	FTE	Testimony Reference	Workpaper Reference
Aging Infrastructure - Replacement of MSAs					GOM-20	Pages 39 - 40
Medium MSAs	$ 72,528	$ 11,435	$ 83,963	0.7		Page 39 Line 1 & Page 40, Line 3
Large MSAs	$ 32,686	$ 5,154	$ 37,840	0.3		Page 39, Line 2 & Page 40, Line 4
Subtotal:	**$ 105,214**	**$ 16,589**	**$ 121,803**	**1.0**		
Aging Infrastructure - Replacement of Regulators at Regulator Stations	**$ 304,250**	**$ 66,637**	**$ 370,887**	**3.3**	GOM-20	Page 45, Line 1 & Page 46, Line 2
Regulatory Requirements					GOM-20 - GOM-21	Pages 41 - 42
Medium MSA Rebuilds	$ 38,065	$ 9,550	$ 47,615	0.4		Page 41, Line 1 & Page 42, Line 3
Large MSA Rebuilds	$ 446,086	$ 45,675	$ 491,761	3.9		Page 41, Line 2 & Page 42, Line 4
Subtotal:	**$ 484,151**	**$ 55,225**	**$ 539,376**	**4.3**		
Increased City/Municipality Requirements					GOM-21	Pages 49 - 52
Limits on Construction Hours - Medium MSA	$ 41,998	$ -	$ 41,998	0.4		Page 51, Line 21
Limits on Construction Hours - Large MSA	$ 77,401	$ -	$ 77,401	0.8		Page 51, Line 22
Limits on Construction Hours - Reg Station	$ 42,822	$ -	$ 42,822	0.4		Page 51, Line 23
Subtotal:	**$ 162,221**	**$ -**	**$ 162,221**	**1.6**		
Regulator Station Lid and Vault Maintenance	**$ 6,253**	**$ 15,869**	**$ 22,122**	**0.1**	GOM-21	Page 44, Lines 1 & 2
Pedestrian Access at Construction Sites	**$ 178,784**	**$ -**	**$ 178,784**	**1.4**	GOM-21 - GOM-22	Page 48, Line 6
Incremental Odorization Testing					GOM-22	Page 43
Medium MSAs	$ 8,568	$ -	$ 8,568	0.1		Page 43, Line 1
Large MSAs	$ 49,722	$ -	$ 49,722	0.4		Page 43, Line 2
Subtotal:	**$ 58,290**	**$ -**	**$ 58,290**	**0.5**		
New Environmental Regulatory Balancing Account	**$ -**	**$ 23,442,000**	**$ 23,442,000**	**0.0**	GOM-22 - GOM-23	Page 53, Lines 27 - 28
Grand Total:	**$ 1,299,163**	**$ 23,596,320**	**$ 24,895,483**	**12.2**		

Southern California Gas Company
Test Year 2012 GRC
Non-Shared Services
2012 Forecast Adjustments for Cathodic Protection Field (Shown in 2009 Dollars)
Testimony Pages: GOM-23 - GOM-25

Area: Gas Distribution
Witness: Gina Orozco-Mejia
Category: Field Operations and Maintenance
Workpaper: 2GD000.006

Description	Labor	Non-Labor	Total	FTE	Testimony Reference	Workpaper Reference
Federal Stimulus Funding	**$ 11,962**	**$ 20,762**	**$ 32,724**	**0.2**	GOM-24	Page 66, Lines 4 & 8
Pedestrian Access at Construction Sites	**$ 86,964**	**$ -**	**$ 86,964**	**0.8**	GOM-24 - GOM-25	Page 64, Line 5
Increased City/Municipality Requirements					GOM-25	Pages 67 - 70
Night Work	$ 6,820	$ 80,573	$ 87,393	0.1		Page 68, Lines 3 & 7
Engineered Traffic Control Plan	$ 13,103	$ 54,653	$ 67,756	0.1		Page 68, Line 11 & Page 69, Line 15
Limits on Construction Hours	$ 9,436	$ 51,530	$ 60,966	0.1		Page 69, Lines 19 & 26
Increased Permit Fees and Construction Requirements	$ -	$ 228,791	$ 228,791	0.0		Page 70, Line 30
Increased Paving Requirements	$ -	$ 279,821	$ 279,821	0.0		Page 70, Line 34
Subtotal:	**$ 29,359**	**$ 695,368**	**$ 724,727**	**0.3**		
Grand Total:	**$ 128,285**	**$ 716,130**	**$ 844,415**	**1.3**		

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Southern California Gas Company
Test Year 2012 GRC
Non-Shared Services
2012 Forecast Adjustments for Main Maintenance (Shown in 2009 Dollars)
Testimony Pages: GOM-25 - GOM-29

Area: Gas Distribution
Witness: Gina Orozco-Mejia
Category: Field Operations and Maintenance
Workpaper: 2GD000.003

Description	Labor	Non-Labor	Total	FTE	Testimony Reference	Workpaper Reference
Federal Stimulus Funding	**$ 53,524**	**$ 12,081**	**$ 65,605**	**0.5**	GOM-27 - GOM-28	Page 91, Lines 2 & 6
Pedestrian Access at Construction Sites	**$ 32,566**	**$ -**	**$ 32,566**	**0.3**	GOM-28	Page 87, Line 3
Los Osos City Sewer System	**$ 169,193**	**$ 353,967**	**$ 523,160**	**1.6**	GOM-28	Page 89, Lines 4 & 9
Increased City/Municipality Requirements					GOM-28 - GOM-29	Pages 82 - 85
Night Work	$ 4,575	$ 54,051	$ 58,626	0.1		Page 83, Lines 1 & 5
Engineered Traffic Control Plan	$ 8,929	$ 37,240	$ 46,169	0.1		Page 83, Line 9 & Page 84, Line 13
Limits on Construction Hours	$ 6,330	$ 34,568	$ 40,898	0.1		Page 84, Lines 17 & 24
Increased Permit Fees and Construction Requirements	$ -	$ 205,934	$ 205,934	0.0		Page 85, Line 28
Increased Paving Requirements	$ -	$ 295,942	$ 295,942	0.0		Page 85, Line 32
Subtotal:	**$ 19,834**	**$ 627,735**	**$ 647,569**	**0.2**		
Grand Total:	**$ 275,117**	**$ 993,783**	**$ 1,268,900**	**2.6**		

Note: Total FTEs shown on work paper were inadvertently rounded up to 3; should be 2.6

Southern California Gas Company
Test Year 2012 GRC
Non-Shared Services
2012 Forecast Adjustments for Service Maintenance (Shown in 2009 Dollars)
Testimony Pages: GOM-29 - GOM-32

Area: Gas Distribution
Witness: Gina Orozco-Mejia
Category: Field Operations and Maintenance
Workpaper: 2GD000.004

Description	Labor	Non-Labor	Total	FTE	Testimony Reference	Workpaper Reference
Federal Stimulus Funding	**$ 39,528**	**$ 7,399**	**$ 46,927**	**0.4**	GOM-30 - GOM-31	Page 107, Lines 3 & 7
Pedestrian Access at Construction Sites	**$ 183,430**	**$ -**	**$ 183,430**	**1.8**	GOM-31	Page 105, Line 4
Los Osos City Sewer System	**$ 215,256**	**$ 36,914**	**$ 252,170**	**2.1**	GOM-31	Page 113, Lines 5 & 10
Increased City/Municipality Requirements					GOM-31	Pages 108 - 111
Night Work	$ 9,238	$ 109,134	$ 118,372	0.1		Page 109, Lines 2 & 6
Engineered Traffic Control Plan	$ 17,748	$ 74,025	$ 91,773	0.2		Page 109, Line 10 & Page 110, Line 14
Limits on Construction Hours	$ 14,300	$ 78,095	$ 92,395	0.1		Page 110, Lines 18 & 25
Increased Permit Fees and Construction Requirements		$ 148,330	$ 148,330	0.0		Page 111, Line 29
Increased Paving Requirements	$ -	$ 224,500	$ 224,500	0.0		Page 111, Line 33
Subtotal:	**$ 41,286**	**$ 634,084**	**$ 675,370**	**0.4**		
Aging Infrastructure - Replace Obsolete Regulators					GOM-32	Page 103
Risers	$ 71,929	$ -	$ 71,929	0.7		Page 103, Line 1
Stopcock Change	$ 34,907	$ -	$ 34,907	0.4		Page 103, Line 2
Small MSA Rebuild	$ 52,084	$ -	$ 52,084	0.6		Page 103, Line 3
Subtotal:	**$ 158,920**	**$ -**	**$ 158,920**	**1.7**		
Grand Total:	**$ 638,420**	**$ 678,397**	**$ 1,316,817**	**6.2**		

Southern California Gas Company
Test Year 2012 GRC
Non-Shared Services
2012 Forecast Adjustments for Field Support (Shown in 2009 Dollars)
Testimony Pages: GOM-32 - GOM-36

Area: Gas Distribution
Witness: Gina Orozco-Mejia
Category: Field Operations and Maintenance
Workpaper: 2GD000.000

Description	Labor	Non-Labor	Total	FTE	Testimony Reference	Workpaper Reference
Incremental Dollars and FTEs Representing the Five Year Average Forecast	**$ 332,000**	**$ 355,000**	**$ 687,000**	**10.0**	GOM-34, Lines 7-12	Page 118
Area Resource Scheduling Organization	**$ 459,000**	**$ -**	**$ 459,000**	**5.4**	GOM-34	Page 126, Line 3
Wireless Fees for Mobile Data Terminals					GOM-34 - GOM-35	Page 125
Field Employees	$ -	$ 225,834	$ 225,834	0.0		Page 125, Line 1
Supervisors	$ -	$ 64,239	$ 64,239	0.0		Page 125, Line 2
Subtotal:	**$ -**	**$ 290,073**	**$ 290,073**	**0.0**		
Miscellaneous Increased Support Requirements					GOM-35	Page 127
City/Muni Req. - Limits on Const. Hours	$ 3,961	$ -	$ 3,961	0.1		Page 127, Line 5
Federal Stimulus Work	$ 3,776	$ -	$ 3,776	0.0		Page 127, Line 10
USA Paint Markings Removal	$ 15,055	$ -	$ 15,055	0.2		Page 127, Line 11
Subtotal:	**$ 22,792**	**$ -**	**$ 22,792**	**0.3**		Page 127, Line 12
Pedestrian Access at Construction Sites	**$ 7,869**	**$ -**	**$ 7,869**	**0.0**	GOM-35	Page 130, Line 2
Support Training for New Technology	**$ 2,731,409**	**$ -**	**$ 2,731,409**	**25.0**	GOM-35 - GOM-36	Page 129, Line 13
Grand Total:	**$ 3,553,070**	**$ 645,073**	**$ 4,198,143**	**40.7**		

Southern California Gas Company
Test Year 2012 GRC
Non-Shared Services
2012 Forecast Adjustments for Tools, Materials, and Fittings (Shown in 2009 Dollars)
Testimony Pages: GOM-36 - GOM-38

Area: Gas Distribution
Witness: Gina Orozco-Mejia
Category: Field Operations and Maintenance
Workpaper: 2GD000.005

Description	Labor	Non-Labor	Total	FTE	Testimony Reference	Workpaper Reference
Incremental Dollars and FTEs Representing the Five Year Average Forecast	**$ -**	**$ 1,492,000**	**$ 1,492,000**	**0.0**	GOM-37, Lines 14-19	Page 134
Safety Vest Replacement	**$ -**	**$ 33,129**	**$ 33,129**	**0.0**	GOM-37 - GOM-38	Page 140, Line 1
Grand Total:	**$ -**	**$ 1,525,129**	**$ 1,525,129**	**0.0**		

Southern California Gas Company
Test Year 2012 GRC
Non-Shared Services
2012 Forecast Adjustments for Pipeline Operations and Maintenance Planning (Shown in 2009 Dollars)
Testimony Pages: GOM-38 - GOM-40

Area: Gas Distribution
Witness: Gina Orozco-Mejia
Category: Asset Management
Workpaper: 2GD001.000

Description	Labor	Non-Labor	Total	FTE	Testimony Reference		Workpaper Reference
Compliance Specialist					GOM-39 - GOM-40	Page 145	
3 FTEs for Stormwater Compliance	$ 270,000	$ -	$ 270,000	3.0		Page 145	
1 FTE for Green House Gas Emission Requirements	$ 76,000	$ -	$ 76,000	1.0		Page 145	
Grand Total:	**$ 346,000**	**$ -**	**$ 346,000**	**4.0**			

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Southern California Gas Company
Test Year 2012 GRC
Non-Shared Services
2012 Forecast Adjustments for Operations Management and Training (Shown in 2009 Dollars)
Testimony Pages: GOM-41 - GOM-50

Area: Gas Distribution
Witness: Gina Orozco-Mejia
Category: Operations Management and Training
Workpaper: 2GD004.000

Description	Labor	Non-Labor	Total	FTE	Testimony Reference	Workpaper Reference
Gas Operations Services					GOM-43 - GOM-46	Pages 172 - 173
Traditional Support Resource Base	$ 1,017,000	$ 76,000	$ 1,093,000	10.5	GOM-44 - GOM-45	Page 172, Lines 10-13
Support of New Technologies	$ 1,340,000	$ 134,000	$ 1,474,000	16.0	GOM-45 - GOM-46	Page 173, Lines 5 - 7
Subtotal:	**$ 2,357,000**	**$ 210,000**	**$ 2,567,000**	**26.5**		
Engineering Rotation Program	**$ 390,000**	**$ -**	**$ 390,000**	**6.0**	GOM-46 - GOM-47	Page 162
Technical Services Field Management					GOM-47	Page 162
Full Year Effect of Hiring FTE in Oct 2009	$ 21,000	$ -	$ 21,000	0.4	GOM-47	Page 162
New Technical Services Field Manager	$ 72,000	$ -	$ 72,000	0.6	GOM-47	Page 162
Subtotal:	**$ 93,000**	**$ -**	**$ 93,000**	**1.0**		
Formal Field Instructional Materials	**$ -**	**$ 536,000**	**$ 536,000**	**0.0**	GOM-47 - GOM-49	Page 162
Educational Aids and Equipment for Field Technical Skills Training	**$ -**	**$ 62,000**	**$ 62,000**	**0.0**	GOM-49	Page 162
Video Embedded System Instruction	**$ -**	**$ 500,000**	**$ 500,000**	**0.0**	GOM-49 - GOM-50	Page 162
Grand Total:	**$ 2,840,000**	**$ 1,308,000**	**$ 4,148,000**	**33.5**		

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0223	000	SVP GAS TRANS & DISTR-USS
2200-0254	000	GAS TRANSMISSION SKILLS TRAINING
2200-0433	000	SOUTH INLAND REGION TSM
2200-0434	000	SOUTH INLAND REGION TECH SERV SUPV 1
2200-0435	000	SOUTH INLAND REGION SYS PROT SUPV
2200-0436	000	SOUTH INLAND REGION TECH SERV SUPV 2
2200-0438	000	SOUTH INLAND REGION REG ENG
2200-0439	000	SOUTH INLAND REGION MEAS SUPV NQ
2200-0441	000	SOUTH INLAND REGION A&C SUPV
2200-0443	000	SOUTH INLAND REGION DISPATCH SUPV
	001	SOUTH INLAND REGION DISPATCH SUPV-Leak Survey
	002	SOUTH INLAND REGION DISPATCH SUPV-Locate & Mark
	003	SOUTH INLAND REGION DISPATCH SUPV-Main Maint
	004	SOUTH INLAND REGION DISPATCH SUPV-Srv Maint
	005	SOUTH INLAND REGION DISPATCH SUPV-Tools, Fitng & Mat
	006	SOUTH INLAND REGION DISPATCH SUPV-Cath Prot Fld
2200-0444	000	SO INL DS DOM FONTANA
	001	SO INL DS DOM FONTANA-Leak Survey
	002	SO INL DS DOM FONTANA-Locate & Mark
	003	SO INL DS DOM FONTANA-Main Maint
	004	SO INL DS DOM FONTANA-Srv Maint
	005	SO INL DS DOM FONTANA-Tools, Fitng & Mat
	006	SO INL DS DOM FONTANA-Cath Prot Fld
2200-0446	000	SO INL CREW SAN BERNARDINO
	001	SO INL CREW SAN BERNARDINO-Leak Survey
	002	SO INL CREW SAN BERNARDINO-Locate & Mark
	003	SO INL CREW SAN BERNARDINO-Main Maint
	004	SO INL CREW SAN BERNARDINO-Srv Maint
	005	SO INL CREW SAN BERNARDINO-Tools, Fitng & Mat
	006	SO INL CREW SAN BERNARDINO-Cath Prot Fld
2200-0447	000	SO INL CREW CORONA
	001	SO INL CREW CORONA-Leak Survey
	002	SO INL CREW CORONA-Locate & Mark
	003	SO INL CREW CORONA-Main Maint
	004	SO INL CREW CORONA-Srv Maint
	005	SO INL CREW CORONA-Tools, Fitng & Mat
	006	SO INL CREW CORONA-Cath Prot Fld
2200-0448	000	SO INL DS DOM CORONA
	001	SO INL DS DOM CORONA-Leak Survey
	002	SO INL DS DOM CORONA-Locate & Mark
	003	SO INL DS DOM CORONA-Main Maint

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0448	004	SO INL DS DOM CORONA-Srv Maint
	005	SO INL DS DOM CORONA-Tools, Fitng & Mat
	006	SO INL DS DOM CORONA-Cath Prot Fld
2200-0450	000	SO INL CREW CHINO
	001	SO INL CREW CHINO-Leak Survey
	002	SO INL CREW CHINO-Locate & Mark
	003	SO INL CREW CHINO-Main Maint
	004	SO INL CREW CHINO-Srv Maint
	005	SO INL CREW CHINO-Tools, Fitng & Mat
	006	SO INL CREW CHINO-Cath Prot Fld
2200-0453	000	SO INL CREW FONTANA
	001	SO INL CREW FONTANA-Leak Survey
	002	SO INL CREW FONTANA-Locate & Mark
	003	SO INL CREW FONTANA-Main Maint
	004	SO INL CREW FONTANA-Srv Maint
	005	SO INL CREW FONTANA-Tools, Fitng & Mat
	006	SO INL CREW FONTANA-Cath Prot Fld
2200-0456	000	SO INL CREW PALM DESERT
	001	SO INL CREW PALM DESERT-Leak Survey
	002	SO INL CREW PALM DESERT-Locate & Mark
	003	SO INL CREW PALM DESERT-Main Maint
	004	SO INL CREW PALM DESERT-Srv Maint
	005	SO INL CREW PALM DESERT-Tools, Fitng & Mat
	006	SO INL CREW PALM DESERT-Cath Prot Fld
2200-0457	000	SO INL DS DOM MURRIETA
	001	SO INL DS DOM MURRIETA-Leak Survey
	002	SO INL DS DOM MURRIETA-Locate & Mark
	003	SO INL DS DOM MURRIETA-Main Maint
	004	SO INL DS DOM MURRIETA-Srv Maint
	005	SO INL DS DOM MURRIETA-Tools, Fitng & Mat
	006	SO INL DS DOM MURRIETA-Cath Prot Fld
2200-0459	000	SO INL CREW RIVERSIDE
	001	SO INL CREW RIVERSIDE-Leak Survey
	002	SO INL CREW RIVERSIDE-Locate & Mark
	003	SO INL CREW RIVERSIDE-Main Maint
	004	SO INL CREW RIVERSIDE-Srv Maint
	005	SO INL CREW RIVERSIDE-Tools, Fitng & Mat
	006	SO INL CREW RIVERSIDE-Cath Prot Fld
2200-0461	000	SO INL CREW RAMONA
	001	SO INL CREW RAMONA-Leak Survey
	002	SO INL CREW RAMONA-Locate & Mark

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0461	003	SO INL CREW RAMONA-Main Maint
	004	SO INL CREW RAMONA-Srv Maint
	005	SO INL CREW RAMONA-Tools, Fitng & Mat
	006	SO INL CREW RAMONA-Cath Prot Fld
2200-0463	000	SO INL DS DOM EL CENTRO
	001	SO INL DS DOM EL CENTRO-Leak Survey
	002	SO INL DS DOM EL CENTRO-Locate & Mark
	003	SO INL DS DOM EL CENTRO-Main Maint
	004	SO INL DS DOM EL CENTRO-Srv Maint
	005	SO INL DS DOM EL CENTRO-Tools, Fitng & Mat
	006	SO INL DS DOM EL CENTRO-Cath Prot Fld
2200-0465	000	SO INL CREW EL CENTRO
	001	SO INL CREW EL CENTRO-Leak Survey
	002	SO INL CREW EL CENTRO-Locate & Mark
	003	SO INL CREW EL CENTRO-Main Maint
	004	SO INL CREW EL CENTRO-Srv Maint
	005	SO INL CREW EL CENTRO-Tools, Fitng & Mat
	006	SO INL CREW EL CENTRO-Cath Prot Fld
2200-0468	000	SO INL CREW RIM FOREST
	001	SO INL CREW RIM FOREST-Leak Survey
	002	SO INL CREW RIM FOREST-Locate & Mark
	003	SO INL CREW RIM FOREST-Main Maint
	004	SO INL CREW RIM FOREST-Srv Maint
	005	SO INL CREW RIM FOREST-Tools, Fitng & Mat
	006	SO INL CREW RIM FOREST-Cath Prot Fld
2200-0469	000	NORTH REGION DOM ALHAMBRA & PASADENA
	001	NORTH REGION DOM ALHAMBRA & PASADENA-Leak Survey
	002	NORTH REGION DOM ALHAMBRA & PASADENA-Locate & Mark
	003	NORTH REGION DOM ALHAMBRA & PASADENA-Main Maint
	004	NORTH REGION DOM ALHAMBRA & PASADENA-Srv Maint
	005	NORTH REGION DOM ALHAMBRA & PASADENA-Tools, Fitng & Mat
	006	NORTH REGION DOM ALHAMBRA & PASADENA-Cath Prot Fld
2200-0471	000	NORTH REGION CREW ALHAMBRA
	001	NORTH REGION CREW ALHAMBRA-Leak Survey
	002	NORTH REGION CREW ALHAMBRA-Locate & Mark
	003	NORTH REGION CREW ALHAMBRA-Main Maint
	004	NORTH REGION CREW ALHAMBRA-Srv Maint
	005	NORTH REGION CREW ALHAMBRA-Tools, Fitng & Mat
	006	NORTH REGION CREW ALHAMBRA-Cath Prot Fld
2200-0472	000	NORTH REGION DOM AZUSA & INDUSTRY
	001	NORTH REGION DOM AZUSA & INDUSTRY-Leak Survey

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0472	002	NORTH REGION DOM AZUSA & INDUSTRY-Locate & Mark
	003	NORTH REGION DOM AZUSA & INDUSTRY-Main Maint
	004	NORTH REGION DOM AZUSA & INDUSTRY-Srv Maint
	005	NORTH REGION DOM AZUSA & INDUSTRY-Tools, Fitng & Mat
	006	NORTH REGION DOM AZUSA & INDUSTRY-Cath Prot Fld
2200-0474	000	NORTH REGION CREW AZUSA
	001	NORTH REGION CREW AZUSA-Leak Survey
	002	NORTH REGION CREW AZUSA-Locate & Mark
	003	NORTH REGION CREW AZUSA-Main Maint
	004	NORTH REGION CREW AZUSA-Srv Maint
	005	NORTH REGION CREW AZUSA-Tools, Fitng & Mat
	006	NORTH REGION CREW AZUSA-Cath Prot Fld
2200-0478	000	NORTH REGION CREW PASADENA
	001	NORTH REGION CREW PASADENA-Leak Survey
	002	NORTH REGION CREW PASADENA-Locate & Mark
	003	NORTH REGION CREW PASADENA-Main Maint
	004	NORTH REGION CREW PASADENA-Srv Maint
	005	NORTH REGION CREW PASADENA-Tools, Fitng & Mat
	006	NORTH REGION CREW PASADENA-Cath Prot Fld
2200-0479	000	NORTH REGN DIRECTOR
2200-0480	000	NORTH REGION TSM
2200-0481	000	NORTH REGION SYS PROT SUPV
2200-0482	000	NORTH REGION A & C SUPV
2200-0483	000	NORTH REGION MEASUREMENT
2200-0484	000	NORTH REGION DOM BAKERSFIELD
	001	NORTH REGION DOM BAKERSFIELD-Leak Survey
	002	NORTH REGION DOM BAKERSFIELD-Locate & Mark
	003	NORTH REGION DOM BAKERSFIELD-Main Maint
	004	NORTH REGION DOM BAKERSFIELD-Srv Maint
	005	NORTH REGION DOM BAKERSFIELD-Tools, Fitng & Mat
	006	NORTH REGION DOM BAKERSFIELD-Cath Prot Fld
2200-0485	000	NORTH REGION REG ENG
2200-0486	000	NORTH REGION TECH SUPV SOUTH
2200-0487	000	NORTH REGION TECH SUPV WEST
2200-0488	000	NORTH REGION TECH SUPV EAST
2200-0489	000	NORTH REGION FOM
2200-0491	000	NORTH REGION DOM VISALIA
	001	NORTH REGION DOM VISALIA-Leak Survey
	002	NORTH REGION DOM VISALIA-Locate & Mark
	003	NORTH REGION DOM VISALIA-Main Maint
	004	NORTH REGION DOM VISALIA-Srv Maint

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0491	005	NORTH REGION DOM VISALIA-Tools, Fitng & Mat
	006	NORTH REGION DOM VISALIA-Cath Prot Fld
2200-0492	000	NORTH REGION CREW VISALIA/HANFORD
	001	NORTH REGION CREW VISALIA/HANFORD-Leak Survey
	002	NORTH REGION CREW VISALIA/HANFORD-Locate & Mark
	003	NORTH REGION CREW VISALIA/HANFORD-Main Maint
	004	NORTH REGION CREW VISALIA/HANFORD-Srv Maint
	005	NORTH REGION CREW VISALIA/HANFORD-Tools, Fitng & Mat
	006	NORTH REGION CREW VISALIA/HANFORD-Cath Prot Fld
2200-0496	000	NORTH REGION CREW BAKERSFIELD
	001	NORTH REGION CREW BAKERSFIELD-Leak Survey
	002	NORTH REGION CREW BAKERSFIELD-Locate & Mark
	003	NORTH REGION CREW BAKERSFIELD-Main Maint
	004	NORTH REGION CREW BAKERSFIELD-Srv Maint
	005	NORTH REGION CREW BAKERSFIELD-Tools, Fitng & Mat
	006	NORTH REGION CREW BAKERSFIELD-Cath Prot Fld
2200-0499	000	NORTH REGION DISPATCH SUPV
	001	NORTH REGION DISPATCH SUPV-Leak Survey
	002	NORTH REGION DISPATCH SUPV-Locate & Mark
	003	NORTH REGION DISPATCH SUPV-Main Maint
	004	NORTH REGION DISPATCH SUPV-Srv Maint
	005	NORTH REGION DISPATCH SUPV-Tools, Fitng & Mat
	006	NORTH REGION DISPATCH SUPV-Cath Prot Fld
2200-0500	000	NORTH REGION DOM SLO, STA MARIA, TEMPLE
	001	NORTH REGION DOM SLO, STA MARIA, TEMPLE-Leak Survey
	002	NORTH REGION DOM SLO, STA MARIA, TEMPLE-Locate & Mark
	003	NORTH REGION DOM SLO, STA MARIA, TEMPLE-Main Maint
	004	NORTH REGION DOM SLO, STA MARIA, TEMPLE-Srv Maint
	005	NORTH REGION DOM SLO, STA MARIA, TEMPLE-Tools, Fitng & Mat
	006	NORTH REGION DOM SLO, STA MARIA, TEMPLE-Cath Prot Fld
2200-0501	000	NORTH REGION CREW SLO/TEMPLETON
	001	NORTH REGION CREW SLO/TEMPLETON-Leak Survey
	002	NORTH REGION CREW SLO/TEMPLETON-Locate & Mark
	003	NORTH REGION CREW SLO/TEMPLETON-Main Maint
	004	NORTH REGION CREW SLO/TEMPLETON-Srv Maint
	005	NORTH REGION CREW SLO/TEMPLETON-Tools, Fitng & Mat
	006	NORTH REGION CREW SLO/TEMPLETON-Cath Prot Fld
2200-0504	000	NORTH REGION CREW SANTA MARIA
	001	NORTH REGION CREW SANTA MARIA-Leak Survey
	002	NORTH REGION CREW SANTA MARIA-Locate & Mark
	003	NORTH REGION CREW SANTA MARIA-Main Maint

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0504	004	NORTH REGION CREW SANTA MARIA-Srv Maint
	005	NORTH REGION CREW SANTA MARIA-Tools, Fitng & Mat
	006	NORTH REGION CREW SANTA MARIA-Cath Prot Fld
2200-0508	000	NORTHERN REGION DOM VENTURA & SIMI
	001	NORTHERN REGION DOM VENTURA & SIMI-Leak Survey
	002	NORTHERN REGION DOM VENTURA & SIMI-Locate & Mark
	003	NORTHERN REGION DOM VENTURA & SIMI-Main Maint
	004	NORTHERN REGION DOM VENTURA & SIMI-Srv Maint
	005	NORTHERN REGION DOM VENTURA & SIMI-Tools, Fitng & Mat
	006	NORTHERN REGION DOM VENTURA & SIMI-Cath Prot Fld
2200-0510	000	NORTH REGION CREW VENTURA
	001	NORTH REGION CREW VENTURA-Leak Survey
	002	NORTH REGION CREW VENTURA-Locate & Mark
	003	NORTH REGION CREW VENTURA-Main Maint
	004	NORTH REGION CREW VENTURA-Srv Maint
	005	NORTH REGION CREW VENTURA-Tools, Fitng & Mat
	006	NORTH REGION CREW VENTURA-Cath Prot Fld
2200-0512	000	NORTH REGION CREW STA BARBARA
	001	NORTH REGION CREW STA BARBARA-Leak Survey
	002	NORTH REGION CREW STA BARBARA-Locate & Mark
	003	NORTH REGION CREW STA BARBARA-Main Maint
	004	NORTH REGION CREW STA BARBARA-Srv Maint
	005	NORTH REGION CREW STA BARBARA-Tools, Fitng & Mat
	006	NORTH REGION CREW STA BARBARA-Cath Prot Fld
2200-0515	000	NORTH REGION DOM CANOGA & SATICOY
	001	NORTH REGION DOM CANOGA & SATICOY-Leak Survey
	002	NORTH REGION DOM CANOGA & SATICOY-Locate & Mark
	003	NORTH REGION DOM CANOGA & SATICOY-Main Maint
	004	NORTH REGION DOM CANOGA & SATICOY-Srv Maint
	005	NORTH REGION DOM CANOGA & SATICOY-Tools, Fitng & Mat
	006	NORTH REGION DOM CANOGA & SATICOY-Cath Prot Fld
2200-0517	000	NORTH REGION CREW CANOGA
	001	NORTH REGION CREW CANOGA-Leak Survey
	002	NORTH REGION CREW CANOGA-Locate & Mark
	003	NORTH REGION CREW CANOGA-Main Maint
	004	NORTH REGION CREW CANOGA-Srv Maint
	005	NORTH REGION CREW CANOGA-Tools, Fitng & Mat
	006	NORTH REGION CREW CANOGA-Cath Prot Fld
2200-0520	000	NORTH REGION CREW SIMI VALLEY
	001	NORTH REGION CREW SIMI VALLEY-Leak Survey
	002	NORTH REGION CREW SIMI VALLEY-Locate & Mark

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0520	003	NORTH REGION CREW SIMI VALLEY-Main Maint
	004	NORTH REGION CREW SIMI VALLEY-Srv Maint
	005	NORTH REGION CREW SIMI VALLEY-Tools, Fitng & Mat
	006	NORTH REGION CREW SIMI VALLEY-Cath Prot Fld
2200-0523	000	NORTH REGION CREW SATICOY
	001	NORTH REGION CREW SATICOY-Leak Survey
	002	NORTH REGION CREW SATICOY-Locate & Mark
	003	NORTH REGION CREW SATICOY-Main Maint
	004	NORTH REGION CREW SATICOY-Srv Maint
	005	NORTH REGION CREW SATICOY-Tools, Fitng & Mat
	006	NORTH REGION CREW SATICOY-Cath Prot Fld
2200-0524	000	NORTH REGION DOM BRANFORD & GLENDALE
	001	NORTH REGION DOM BRANFORD & GLENDALE-Leak Survey
	002	NORTH REGION DOM BRANFORD & GLENDALE-Locate & Mark
	003	NORTH REGION DOM BRANFORD & GLENDALE-Main Maint
	004	NORTH REGION DOM BRANFORD & GLENDALE-Srv Maint
	005	NORTH REGION DOM BRANFORD & GLENDALE-Tools, Fitng & Mat
	006	NORTH REGION DOM BRANFORD & GLENDALE-Cath Prot Fld
2200-0526	000	NORTH REGION CREW BRANFORD
	001	NORTH REGION CREW BRANFORD-Leak Survey
	002	NORTH REGION CREW BRANFORD-Locate & Mark
	003	NORTH REGION CREW BRANFORD-Main Maint
	004	NORTH REGION CREW BRANFORD-Srv Maint
	005	NORTH REGION CREW BRANFORD-Tools, Fitng & Mat
	006	NORTH REGION CREW BRANFORD-Cath Prot Fld
2200-0528	000	NORTH REGION CREW GLENDALE
	001	NORTH REGION CREW GLENDALE-Leak Survey
	002	NORTH REGION CREW GLENDALE-Locate & Mark
	003	NORTH REGION CREW GLENDALE-Main Maint
	004	NORTH REGION CREW GLENDALE-Srv Maint
	005	NORTH REGION CREW GLENDALE-Tools, Fitng & Mat
	006	NORTH REGION CREW GLENDALE-Cath Prot Fld
2200-0530	000	NORTH REGION DOM VALENCIA
	001	NORTH REGION DOM VALENCIA-Leak Survey
	002	NORTH REGION DOM VALENCIA-Locate & Mark
	003	NORTH REGION DOM VALENCIA-Main Maint
	004	NORTH REGION DOM VALENCIA-Srv Maint
	005	NORTH REGION DOM VALENCIA-Tools, Fitng & Mat
	006	NORTH REGION DOM VALENCIA-Cath Prot Fld
2200-0532	000	NORTH REGION CREW VALENCIA
	001	NORTH REGION CREW VALENCIA-Leak Survey

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0532	002	NORTH REGION CREW VALENCIA-Locate & Mark
	003	NORTH REGION CREW VALENCIA-Main Maint
	004	NORTH REGION CREW VALENCIA-Srv Maint
	005	NORTH REGION CREW VALENCIA-Tools, Fitng & Mat
	006	NORTH REGION CREW VALENCIA-Cath Prot Fld
2200-0535	000	NORTH REGION CREW LANCASTER
	001	NORTH REGION CREW LANCASTER-Leak Survey
	002	NORTH REGION CREW LANCASTER-Locate & Mark
	003	NORTH REGION CREW LANCASTER-Main Maint
	004	NORTH REGION CREW LANCASTER-Srv Maint
	005	NORTH REGION CREW LANCASTER-Tools, Fitng & Mat
	006	NORTH REGION CREW LANCASTER-Cath Prot Fld
2200-0536	000	PACIFIC COAST REGION DIST DIRECTOR
2200-0537	000	PACIFIC COAST REGION ENVIRONMENTAL
2200-0538	000	PACIFIC COAST REGION REG ENG - ANA
2200-0539	000	PACIFIC COAST REGION TECH SERV SUPV WN
2200-0540	000	PACIFIC COAST REGION TECH SERV SUPV WO
2200-0541	000	PACIFIC COAST REGION SYS PROT SUPV - ANA
2200-0542	000	PACIFIC COAST REGION MEAS SUPV ANA
2200-0543	000	PACIFIC COAST REGION A & C SUPV - ANA
2200-0544	000	PACIFIC COAST DIST FIELD OPS MANAGER
2200-0545	000	PACIFIC COST DOM DOWNEY & GARDEN GROVE
	001	PACIFIC COST DOM DOWNEY & GARDEN GROVE-Leak Survey
	002	PACIFIC COST DOM DOWNEY & GARDEN GROVE-Locate & Mark
	003	PACIFIC COST DOM DOWNEY & GARDEN GROVE-Main Maint
	004	PACIFIC COST DOM DOWNEY & GARDEN GROVE-Srv Maint
	005	PACIFIC COST DOM DOWNEY & GARDEN GROVE-Tools, Fitng & Mat
	006	PACIFIC COST DOM DOWNEY & GARDEN GROVE-Cath Prot Fld
2200-0547	000	PACIFIC COAST REGION CREW DOWNEY
	001	PACIFIC COAST REGION CREW DOWNEY-Leak Survey
	002	PACIFIC COAST REGION CREW DOWNEY-Locate & Mark
	003	PACIFIC COAST REGION CREW DOWNEY-Main Maint
	004	PACIFIC COAST REGION CREW DOWNEY-Srv Maint
	005	PACIFIC COAST REGION CREW DOWNEY-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW DOWNEY-Cath Prot Fld
2200-0548	000	PACIFIC COAST DOM WHITTIER & BELVEDERE
	001	PACIFIC COAST DOM WHITTIER & BELVEDERE-Leak Survey
	002	PACIFIC COAST DOM WHITTIER & BELVEDERE-Locate & Mark
	003	PACIFIC COAST DOM WHITTIER & BELVEDERE-Main Maint
	004	PACIFIC COAST DOM WHITTIER & BELVEDERE-Srv Maint
	005	PACIFIC COAST DOM WHITTIER & BELVEDERE-Tools, Fitng & Mat

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Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0548	006	PACIFIC COAST DOM WHITTIER & BELVEDERE-Cath Prot Fld
2200-0549	000	PACIFIC COAST REGION DIST CREW WHITTIER
	001	PACIFIC COAST REGION DIST CREW WHITTIER-Leak Survey
	002	PACIFIC COAST REGION DIST CREW WHITTIER-Locate & Mark
	003	PACIFIC COAST REGION DIST CREW WHITTIER-Main Maint
	004	PACIFIC COAST REGION DIST CREW WHITTIER-Srv Maint
	005	PACIFIC COAST REGION DIST CREW WHITTIER-Tools, Fitng & Mat
	006	PACIFIC COAST REGION DIST CREW WHITTIER-Cath Prot Fld
2200-0551	000	PACIFIC COAST DOM ANAHEIM & LA JOLLA
	001	PACIFIC COAST DOM ANAHEIM & LA JOLLA-Leak Survey
	002	PACIFIC COAST DOM ANAHEIM & LA JOLLA-Locate & Mark
	003	PACIFIC COAST DOM ANAHEIM & LA JOLLA-Main Maint
	004	PACIFIC COAST DOM ANAHEIM & LA JOLLA-Srv Maint
	005	PACIFIC COAST DOM ANAHEIM & LA JOLLA-Tools, Fitng & Mat
	006	PACIFIC COAST DOM ANAHEIM & LA JOLLA-Cath Prot Fld
2200-0553	000	PACIFIC COAST REGION CREW ANAHEIM
	001	PACIFIC COAST REGION CREW ANAHEIM-Leak Survey
	002	PACIFIC COAST REGION CREW ANAHEIM-Locate & Mark
	003	PACIFIC COAST REGION CREW ANAHEIM-Main Maint
	004	PACIFIC COAST REGION CREW ANAHEIM-Srv Maint
	005	PACIFIC COAST REGION CREW ANAHEIM-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW ANAHEIM-Cath Prot Fld
2200-0555	000	PACIFIC COAST REGION CREW LA JOLLA
	001	PACIFIC COAST REGION CREW LA JOLLA-Leak Survey
	002	PACIFIC COAST REGION CREW LA JOLLA-Locate & Mark
	003	PACIFIC COAST REGION CREW LA JOLLA-Main Maint
	004	PACIFIC COAST REGION CREW LA JOLLA-Srv Maint
	005	PACIFIC COAST REGION CREW LA JOLLA-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW LA JOLLA-Cath Prot Fld
2200-0557	000	DISTRIBUTION DISPATCH - ANAHEIM
	001	DISTRIBUTION DISPATCH - ANAHEIM-Leak Survey
	002	DISTRIBUTION DISPATCH - ANAHEIM-Locate & Mark
	003	DISTRIBUTION DISPATCH - ANAHEIM-Main Maint
	004	DISTRIBUTION DISPATCH - ANAHEIM-Srv Maint
	005	DISTRIBUTION DISPATCH - ANAHEIM-Tools, Fitng & Mat
	006	DISTRIBUTION DISPATCH - ANAHEIM-Cath Prot Fld
2200-0559	000	PACIFIC COAST REGION CREW ALISO VIEJO
	001	PACIFIC COAST REGION CREW ALISO VIEJO-Leak Survey
	002	PACIFIC COAST REGION CREW ALISO VIEJO-Locate & Mark
	003	PACIFIC COAST REGION CREW ALISO VIEJO-Main Maint
	004	PACIFIC COAST REGION CREW ALISO VIEJO-Srv Maint

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Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0559	005	PACIFIC COAST REGION CREW ALISO VIEJO-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW ALISO VIEJO-Cath Prot Fld
2200-0562	000	PACIFIC COAST REGION CREW G GROVE
	001	PACIFIC COAST REGION CREW G GROVE-Leak Survey
	002	PACIFIC COAST REGION CREW G GROVE-Locate & Mark
	003	PACIFIC COAST REGION CREW G GROVE-Main Maint
	004	PACIFIC COAST REGION CREW G GROVE-Srv Maint
	005	PACIFIC COAST REGION CREW G GROVE-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW G GROVE-Cath Prot Fld
2200-0564	000	PACIFIC COAST DOM STA ANA & A VIEJO
	001	PACIFIC COAST DOM STA ANA & A VIEJO-Leak Survey
	002	PACIFIC COAST DOM STA ANA & A VIEJO-Locate & Mark
	003	PACIFIC COAST DOM STA ANA & A VIEJO-Main Maint
	004	PACIFIC COAST DOM STA ANA & A VIEJO-Srv Maint
	005	PACIFIC COAST DOM STA ANA & A VIEJO-Tools, Fitng & Mat
	006	PACIFIC COAST DOM STA ANA & A VIEJO-Cath Prot Fld
2200-0565	000	PACIFIC COAST REGION CREW STA ANA
	001	PACIFIC COAST REGION CREW STA ANA-Leak Survey
	002	PACIFIC COAST REGION CREW STA ANA-Locate & Mark
	003	PACIFIC COAST REGION CREW STA ANA-Main Maint
	004	PACIFIC COAST REGION CREW STA ANA-Srv Maint
	005	PACIFIC COAST REGION CREW STA ANA-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW STA ANA-Cath Prot Fld
2200-0567	000	NORTH REGION TECH SUPV - SOUTHEAST
2200-0569	000	NORTH REGION CREW INDUSTRY
	001	NORTH REGION CREW INDUSTRY-Leak Survey
	002	NORTH REGION CREW INDUSTRY-Locate & Mark
	003	NORTH REGION CREW INDUSTRY-Main Maint
	004	NORTH REGION CREW INDUSTRY-Srv Maint
	005	NORTH REGION CREW INDUSTRY-Tools, Fitng & Mat
	006	NORTH REGION CREW INDUSTRY-Cath Prot Fld
2200-0575	000	PACIFIC COAST REGION CREW BELVEDERE
	001	PACIFIC COAST REGION CREW BELVEDERE-Leak Survey
	002	PACIFIC COAST REGION CREW BELVEDERE-Locate & Mark
	003	PACIFIC COAST REGION CREW BELVEDERE-Main Maint
	004	PACIFIC COAST REGION CREW BELVEDERE-Srv Maint
	005	PACIFIC COAST REGION CREW BELVEDERE-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW BELVEDERE-Cath Prot Fld
2200-0576	000	PACIFIC COAST DOM JUANITA & CRENSHAW
	001	PACIFIC COAST DOM JUANITA & CRENSHAW-Leak Survey
	002	PACIFIC COAST DOM JUANITA & CRENSHAW-Locate & Mark

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0576	003	PACIFIC COAST DOM JUANITA & CRENSHAW-Main Maint
	004	PACIFIC COAST DOM JUANITA & CRENSHAW-Srv Maint
	005	PACIFIC COAST DOM JUANITA & CRENSHAW-Tools, Fitng & Mat
	006	PACIFIC COAST DOM JUANITA & CRENSHAW-Cath Prot Fld
2200-0577	000	PACIFIC COAST REGION CREW JUANITA
	001	PACIFIC COAST REGION CREW JUANITA-Leak Survey
	002	PACIFIC COAST REGION CREW JUANITA-Locate & Mark
	003	PACIFIC COAST REGION CREW JUANITA-Main Maint
	004	PACIFIC COAST REGION CREW JUANITA-Srv Maint
	005	PACIFIC COAST REGION CREW JUANITA-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW JUANITA-Cath Prot Fld
2200-0580	000	DISTRIBUTION DISPATCH - COMPTON
	001	DISTRIBUTION DISPATCH - COMPTON-Leak Survey
	002	DISTRIBUTION DISPATCH - COMPTON-Locate & Mark
	003	DISTRIBUTION DISPATCH - COMPTON-Main Maint
	004	DISTRIBUTION DISPATCH - COMPTON-Srv Maint
	005	DISTRIBUTION DISPATCH - COMPTON-Tools, Fitng & Mat
	006	DISTRIBUTION DISPATCH - COMPTON-Cath Prot Fld
2200-0581	000	PACIFIC COAST DISTRIB MEAS SUPV JUANITA
2200-0583	000	PACIFIC COAST REGION CREW HUNTNGTN PRK
	001	PACIFIC COAST REGION CREW HUNTNGTN PRK-Leak Survey
	002	PACIFIC COAST REGION CREW HUNTNGTN PRK-Locate & Mark
	003	PACIFIC COAST REGION CREW HUNTNGTN PRK-Main Maint
	004	PACIFIC COAST REGION CREW HUNTNGTN PRK-Srv Maint
	005	PACIFIC COAST REGION CREW HUNTNGTN PRK-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW HUNTNGTN PRK-Cath Prot Fld
2200-0586	000	PACIFIC COAST REGION CREW COMPTON
	001	PACIFIC COAST REGION CREW COMPTON-Leak Survey
	002	PACIFIC COAST REGION CREW COMPTON-Locate & Mark
	003	PACIFIC COAST REGION CREW COMPTON-Main Maint
	004	PACIFIC COAST REGION CREW COMPTON-Srv Maint
	005	PACIFIC COAST REGION CREW COMPTON-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW COMPTON-Cath Prot Fld
2200-0588	000	PACIFIC COAST REGION CREW CRENSHAW
	001	PACIFIC COAST REGION CREW CRENSHAW-Leak Survey
	002	PACIFIC COAST REGION CREW CRENSHAW-Locate & Mark
	003	PACIFIC COAST REGION CREW CRENSHAW-Main Maint
	004	PACIFIC COAST REGION CREW CRENSHAW-Srv Maint
	005	PACIFIC COAST REGION CREW CRENSHAW-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW CRENSHAW-Cath Prot Fld
2200-0590	000	PACIFIC DOM SANTA MONICA & HOLLYWOOD

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Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0590	001	PACIFIC DOM SANTA MONICA & HOLLYWOOD-Leak Survey
	002	PACIFIC DOM SANTA MONICA & HOLLYWOOD-Locate & Mark
	003	PACIFIC DOM SANTA MONICA & HOLLYWOOD-Main Maint
	004	PACIFIC DOM SANTA MONICA & HOLLYWOOD-Srv Maint
	005	PACIFIC DOM SANTA MONICA & HOLLYWOOD-Tools, Fitng & Mat
	006	PACIFIC DOM SANTA MONICA & HOLLYWOOD-Cath Prot Fld
2200-0592	000	PACIFIC COAST REGION CREW SANTA MONICA
	001	PACIFIC COAST REGION CREW SANTA MONICA-Leak Survey
	002	PACIFIC COAST REGION CREW SANTA MONICA-Locate & Mark
	003	PACIFIC COAST REGION CREW SANTA MONICA-Main Maint
	004	PACIFIC COAST REGION CREW SANTA MONICA-Srv Maint
	005	PACIFIC COAST REGION CREW SANTA MONICA-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW SANTA MONICA-Cath Prot Fld
2200-0593	000	PACIFIC COAST DOM REDONDO & SAN PEDRO
	001	PACIFIC COAST DOM REDONDO & SAN PEDRO-Leak Survey
	002	PACIFIC COAST DOM REDONDO & SAN PEDRO-Locate & Mark
	003	PACIFIC COAST DOM REDONDO & SAN PEDRO-Main Maint
	004	PACIFIC COAST DOM REDONDO & SAN PEDRO-Srv Maint
	005	PACIFIC COAST DOM REDONDO & SAN PEDRO-Tools, Fitng & Mat
	006	PACIFIC COAST DOM REDONDO & SAN PEDRO-Cath Prot Fld
2200-0595	000	PACIFIC COAST REGION CREW REDONDO
	001	PACIFIC COAST REGION CREW REDONDO-Leak Survey
	002	PACIFIC COAST REGION CREW REDONDO-Locate & Mark
	003	PACIFIC COAST REGION CREW REDONDO-Main Maint
	004	PACIFIC COAST REGION CREW REDONDO-Srv Maint
	005	PACIFIC COAST REGION CREW REDONDO-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW REDONDO-Cath Prot Fld
2200-0598	000	PACIFIC COAST REGION CREW SAN PEDRO
	001	PACIFIC COAST REGION CREW SAN PEDRO-Leak Survey
	002	PACIFIC COAST REGION CREW SAN PEDRO-Locate & Mark
	003	PACIFIC COAST REGION CREW SAN PEDRO-Main Maint
	004	PACIFIC COAST REGION CREW SAN PEDRO-Srv Maint
	005	PACIFIC COAST REGION CREW SAN PEDRO-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW SAN PEDRO-Cath Prot Fld
2200-0601	000	PACIFIC COAST REGION CREW HOLLYWOOD
	001	PACIFIC COAST REGION CREW HOLLYWOOD-Leak Survey
	002	PACIFIC COAST REGION CREW HOLLYWOOD-Locate & Mark
	003	PACIFIC COAST REGION CREW HOLLYWOOD-Main Maint
	004	PACIFIC COAST REGION CREW HOLLYWOOD-Srv Maint
	005	PACIFIC COAST REGION CREW HOLLYWOOD-Tools, Fitng & Mat
	006	PACIFIC COAST REGION CREW HOLLYWOOD-Cath Prot Fld

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0603	000	TSM - GAS DISTRIBUTION PACIFIC COAST
2200-0604	000	PACIFIC COAST REG TECH SERV SUPV - COM
2200-0605	000	PACIFIC COAST REGION SYS PROT SUPV - COM
2200-0606	000	PACIFIC COAST REG ENG - COM
2200-0608	000	PACIFIC COAST REGION MEAS SUPV COM
2200-0609	000	PACIFIC COAST REGION A & C SUPV - COM
2200-0614	000	GAS DISTRIBUTION SKILLS TRAINING
2200-0615	000	NEW BUSINESS
2200-0616	000	DART REPORTING - DISTRIBUTION
2200-0617	000	BUSINESS SERVICES MANAGER
2200-0801	000	PROJECT MANAGERS
2200-0804	000	VP REGIONAL/EXTERNAL RELATIONS
2200-0805	000	PUBLIC AFFAIRS MANAGER - OC
2200-0811	000	PUBLIC AFFAIRS MANAGER - LA
2200-0818	000	PUBLIC AFFAIRS MANAGER -INLAND
2200-0825	000	PUBLIC AFFAIRS MANAGER -NORTH
2200-1174	000	NORTH REGION PL PRJ MGR
2200-1182	000	SO INL DS DOM PALM DESERT
	001	SO INL DS DOM PALM DESERT-Leak Survey
	002	SO INL DS DOM PALM DESERT-Locate & Mark
	003	SO INL DS DOM PALM DESERT-Main Maint
	004	SO INL DS DOM PALM DESERT-Srv Maint
	005	SO INL DS DOM PALM DESERT-Tools, Fitng & Mat
	006	SO INL DS DOM PALM DESERT-Cath Prot Fld
2200-1210	000	SOUTH INLAND REGION MAPPING
2200-1340	000	SOUTH INLAND REGION PL PRJ MGR
2200-1544	000	PACIFIC COAST COAST DIST OPS QUALITY
	001	PACIFIC COAST COAST DIST OPS QUALITY-Leak Survey
	002	PACIFIC COAST COAST DIST OPS QUALITY-Locate & Mark
	003	PACIFIC COAST COAST DIST OPS QUALITY-Main Maint
	004	PACIFIC COAST COAST DIST OPS QUALITY-Srv Maint
	005	PACIFIC COAST COAST DIST OPS QUALITY-Tools, Fitng & Mat
	006	PACIFIC COAST COAST DIST OPS QUALITY-Cath Prot Fld
2200-1826	000	NO DISTRICT MANAGER 1
2200-1827	000	NO DISTRICT MANAGER 2
2200-1828	000	NO DISTRICT MANAGER 3
2200-1829	000	NO DISTRICT MANAGER 4
2200-1830	000	NO DISTRICT MANAGER 5
2200-1831	000	NO DISTRICT MANAGER 6
2200-2079	000	SO INL CREW MURRIETA
	001	SO INL CREW MURRIETA-Leak Survey

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Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-2079	002	SO INL CREW MURRIETA-Locate & Mark
	003	SO INL CREW MURRIETA-Main Maint
	004	SO INL CREW MURRIETA-Srv Maint
	005	SO INL CREW MURRIETA-Tools, Fitng & Mat
	006	SO INL CREW MURRIETA-Cath Prot Fld
2200-2080	000	SO INL CREW BEAUMONT
	001	SO INL CREW BEAUMONT-Leak Survey
	002	SO INL CREW BEAUMONT-Locate & Mark
	003	SO INL CREW BEAUMONT-Main Maint
	004	SO INL CREW BEAUMONT-Srv Maint
	005	SO INL CREW BEAUMONT-Tools, Fitng & Mat
	006	SO INL CREW BEAUMONT-Cath Prot Fld
2200-2084	000	PACIFIC COAST REG TECH SERV SUPV 2 COM
2200-2085	000	PACIFIC COAST REG TECH SERV SUPV 3 COM
2200-2092	000	GAS TRANS & DISTR OPERATIONS VP - NSS
2200-2097	000	GOVERNMENTAL AFFAIRS MANAGER - LA
2200-2098	000	LEGISLATIVE ANALYSIS & POLICY MANAGER
2200-2116	000	PACIFIC REGION TECHNICAL SERVICES - CAD
2200-2122	000	FIBRE IN GAS ADMIN COSTS & REVENUE
2200-2138	000	FRANCHISE AND FEES MANAGER - BPS
2200-2141	000	SOUTH INLAND FOM
2200-2144	000	GAS TRANS & DISTR SERVICES DIR
2200-2149	000	NORTH REGION DOM SANTA BARBARA
	001	NORTH REGION DOM SANTA BARBARA-Leak Survey
	002	NORTH REGION DOM SANTA BARBARA-Locate & Mark
	003	NORTH REGION DOM SANTA BARBARA-Main Maint
	004	NORTH REGION DOM SANTA BARBARA-Srv Maint
	005	NORTH REGION DOM SANTA BARBARA-Tools, Fitng & Mat
	006	NORTH REGION DOM SANTA BARBARA-Cath Prot Fld
2200-2191	000	NORTH REGION DOM LANCASTER
	001	NORTH REGION DOM LANCASTER-Leak Survey
	002	NORTH REGION DOM LANCASTER-Locate & Mark
	003	NORTH REGION DOM LANCASTER-Main Maint
	004	NORTH REGION DOM LANCASTER-Srv Maint
	005	NORTH REGION DOM LANCASTER-Tools, Fitng & Mat
	006	NORTH REGION DOM LANCASTER-Cath Prot Fld
2200-2208	000	SR. REGIONAL PUBLIC AFFAIRS MANAGER
2200-2217	000	SO INL DS DOM SAN BERNARDINO
	001	SO INL DS DOM SAN BERNARDINO-Leak Survey
	002	SO INL DS DOM SAN BERNARDINO-Locate & Mark
	003	SO INL DS DOM SAN BERNARDINO-Main Maint

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-2217	004	SO INL DS DOM SAN BERNARDINO-Srv Maint
	005	SO INL DS DOM SAN BERNARDINO-Tools, Fitng & Mat
	006	SO INL DS DOM SAN BERNARDINO-Cath Prot Fld
2200-2218	000	SO INL DS DOM RIM FOREST
	001	SO INL DS DOM RIM FOREST-Leak Survey
	002	SO INL DS DOM RIM FOREST-Locate & Mark
	003	SO INL DS DOM RIM FOREST-Main Maint
	004	SO INL DS DOM RIM FOREST-Srv Maint
	005	SO INL DS DOM RIM FOREST-Tools, Fitng & Mat
	006	SO INL DS DOM RIM FOREST-Cath Prot Fld
2200-2219	000	SO INL DS DOM BEAUMONT
	001	SO INL DS DOM BEAUMONT-Leak Survey
	002	SO INL DS DOM BEAUMONT-Locate & Mark
	003	SO INL DS DOM BEAUMONT-Main Maint
	004	SO INL DS DOM BEAUMONT-Srv Maint
	005	SO INL DS DOM BEAUMONT-Tools, Fitng & Mat
	006	SO INL DS DOM BEAUMONT-Cath Prot Fld
2200-2220	000	SO INL DS DOM CHINO
	001	SO INL DS DOM CHINO-Leak Survey
	002	SO INL DS DOM CHINO-Locate & Mark
	003	SO INL DS DOM CHINO-Main Maint
	004	SO INL DS DOM CHINO-Srv Maint
	005	SO INL DS DOM CHINO-Tools, Fitng & Mat
	006	SO INL DS DOM CHINO-Cath Prot Fld
2200-2221	000	SO INL DS DOM RIVERSIDE
	001	SO INL DS DOM RIVERSIDE-Leak Survey
	002	SO INL DS DOM RIVERSIDE-Locate & Mark
	003	SO INL DS DOM RIVERSIDE-Main Maint
	004	SO INL DS DOM RIVERSIDE-Srv Maint
	005	SO INL DS DOM RIVERSIDE-Tools, Fitng & Mat
	006	SO INL DS DOM RIVERSIDE-Cath Prot Fld
2200-2222	000	SO INL DS DOM RAMONA
2200-2232	000	SO INL DS DOM YUCCA VLY
	001	SO INL DS DOM YUCCA VLY-Leak Survey
	002	SO INL DS DOM YUCCA VLY-Locate & Mark
	003	SO INL DS DOM YUCCA VLY-Main Maint
	004	SO INL DS DOM YUCCA VLY-Srv Maint
	005	SO INL DS DOM YUCCA VLY-Tools, Fitng & Mat
	006	SO INL DS DOM YUCCA VLY-Cath Prot Fld
2200-2233	000	SO INL CREW YUCCA VLY
	001	SO INL CREW YUCCA VLY-Leak Survey

Area: GOGD - GAS DISTRIBUTION
Witness: Orozco, Guillermina

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-2233	002	SO INL CREW YUCCA VLY-Locate & Mark
	003	SO INL CREW YUCCA VLY-Main Maint
	004	SO INL CREW YUCCA VLY-Srv Maint
	005	SO INL CREW YUCCA VLY-Tools, Fitng & Mat
	006	SO INL CREW YUCCA VLY-Cath Prot Fld
2200-2236	000	SOUTH INLAND REGION FOM
2200-2259	000	PACIFIC COAST CITY OF VERNON PROJECT
	001	PACIFIC COAST CITY OF VERNON PROJECT-Leak Survey
	002	PACIFIC COAST CITY OF VERNON PROJECT-Locate & Mark
	003	PACIFIC COAST CITY OF VERNON PROJECT-Main Maint
	004	PACIFIC COAST CITY OF VERNON PROJECT-Srv Maint
	005	PACIFIC COAST CITY OF VERNON PROJECT-Tools, Fitng & Mat
	006	PACIFIC COAST CITY OF VERNON PROJECT-Cath Prot Fld
2200-2311	000	SOUTH INLAND CREW BLYTHE