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	,
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



## 2012 General Rate Case - APP INDEX OF WORKPAPERS

## **Exhibit SCG-02 - GAS DISTRIBUTION**

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## Overall Summary For Exhibit No. SCG-02

Area: GAS DISTRIBUTION

Witness: Orozco, Guillermina

Description

Non-Shared Services

Shared Services

Total

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

Area: GAS DISTRIBUTION Witness: Orozco, Guillermina

## **Summary of Non-Shared Services Workpapers:**

## Description

A. Field Operations & Maintenance

B. Asset Management

C. Operations Management & Training

D. Regional Public Affairs

Total

In 2009 \$ (000)							
Adjusted- Recorded	Adjusted-Forecast						
2009	2010	2010 2011 2012					
66,666	71,981	96,321	100,934				
13,967	13,844	14,152	14,190				
7,772	8,826	10,731	12,151				
3,907	3,907	3,907	3,907				
92,312	98,558	125,111	131,182				

In 2009\$ (000)

2010

54,472

Adjusted-Forecast

53,822

2012

56,782

2011

Area: GAS DISTRIBUTION Witness: Orozco, Guillermina

Category: A. Field Operations & Maintenance

Workpaper: VARIOUS

Labor

## Summary for Category: A. Field Operations & Maintenance

Adjusted-Recorded

49,878

2009

	- /	,	/ -	, -
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 Catogory:			
	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 Survev			
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	<b>O&amp;M-Service Maintenance</b>			
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 & Materi	als					
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 Fig	eld					
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 Measure	ment & 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:**

Years
Labor
Non-Labor
NSE
Total
FTE

	In 2009\$ (000)								
	Adju	sted-Record	Ad	justed-Fore	cast				
2005	2006	2007	2008	2009	2010	2011	2012		
8,701	8,916	9,517	9,001	9,054	9,328	9,377	9,497		
807	1,029	803	875	633	975	1,014	1,060		
0	0	0	0	0	0	0	0		
9,508	9,945	10,320	9,876	9,687	10,303	10,391	10,557		
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	t Method	Base Forecast			Forecast Adjustments			Adjusted-Forecast		
		<u>2010</u> <u>2011</u> <u>2012</u>			<u>2010</u>	<u>2011</u>	<u>2012</u>	2010	<u>2011</u>	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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 0 185 185 1-Sided Adj 0.0 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. 0 2011 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 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 231 231 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 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:**

cicilination of Adjuste	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 (No	minal \$)				
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 (Nomina	al \$)				
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 (Cor	nstant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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 Nom	inal \$ (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:**

Detail of Adjus	stments to Rec	oraea:					
Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type	From CCtr	<u>RefID</u>
2005	0	532	0	0.0	1-Sided Adj	N/A	TP1MTC2009100 8134645887
will combin	ie both the USA	A fees and	the Locate	& Mar	center 2200-209 k expenditures in crease) in cost c		0134043007
2005 Total	0	532	0	0.0			
will combin	e both the USA	A fees and	the Locate	m cost & Mar	1-Sided Adj center 2200-209 k expenditures in crease) in cost c		TP1MTC2009100 8134732607
2006 Total	0	583	0	0.0			
will combin	e both the USA	A fees and	the Locate	m cost & Mar	1-Sided Adj center 2200-209 k expenditures in crease) in cost c		TP1MTC2009100 8134904123
2007 Total	0	520	0	0.0			

Area: GAS DISTRIBUTION Witness: Orozco, Guillermina

Category: A. Field Operations & Maintenance

Category-Sub: 1. Locate & Mark

Workpaper:		000.002 - Pi		M-Locate	& Mark		
Year/Expl.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	RefID
2008	0	608	0		Sided Adj	N/A	TP1MTC2009100 8134946623
will combir	ne both the US	A fees and t	he Locate	& Mark e	xpenditures i	92. The transfer nto the same center 2200-2092.	
2008 Total	0	608	0	0.0			
will combin	0 adjustment to ne both the US . Correspondir	A fees and t	he Locate	n cost ce & Mark e	expenditures i		TP1MTC2010020 3133810303
•	count. Corres		•	ase whic	•	N/A d to the small tools ittings, & Materials	TP1MTC2010050 3085126373

**Supplemental Workpapers for Workpaper 2GD000.002** 

# Supplemental Workpaper Calculations for incremental costs related to Removal of USA One-call Paint Markings Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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 Underground Service Alert (USA) ticket to remove markings placed by all utilities responding to the ticket. In association with SCG's construction own construction work, SCG will request other utilities to mark their underground facilities. The onus then is placed on the entity requesting the activities, SCG field personnel will remove marks utilizing a variety of methods. The calculation of these incremental costs are shown below.

Locate and Mark Workgroups affected:

Methodology:

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

fotal 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

fotal Orders x Estimated percent of total orders requiring paint mark removal x Estimated material costs per order

impact of this requirement. Their responses indicated that, in the past ,SCG's territory saw approximately 5% of their 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 -abor Assumptions:

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.

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 × 1.5 = \$105,000

$\vdash$	N	FIE	2.0
	2010   2011   2012	Ŧ	2.0
	2010	FTE	2.0
		2012	209,467
	-	2011	\$ 209,467 \$
		2010	209,467
	Total per	Year	\$ 209,467
Overtime	Crew Rate	(2 person)	\$ 100.71
Estimated	Duration	(Hrs)	1
Percent	requiring Paint	Removal	15%
	Total Orders	per Year	13,866
	lahor		
	Percent   Estimated   Ov	Percent Estimated Overtime Total Orders requiring Paint Duration Crew Rate Total per	Labor Der Year Removal (Hrs) (2 person) Year 2010 2011 2012

Supplemental Workpaper Calculations for incremental costs related to Removal of USA One call Paint Markings Southern California Gas Company - Gas Distrubtion - Witness Gina Orozco-Mejia

Non Labor Assumptions:

cathodic protection work, and depth checks. Based on information provided by SCG's district management, the [A] [B]: 2005-2009 average number of orders generated by main leak repairs, service leak repairs/alterations, 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.

			2012	2102	20 700	40,733
	-				4	7
			2011	1011	20 799	7
	H		•	1	υ: σ:	•
			2010		20.79	
	L			1	G	-
[AxBxC]		Total per	Year		\$ 20,799	:
<u>ত</u>	Material	Costs per	Order	000	00.00	
[8]	Percent	requiring Paint	Removal	7000	15.00%	
[¥]		Total Orders	per Year	12 000	13,000	
		Non-Labor				
_	#	əu	רויִי	~	1	

## Supplemental Workpaper Calculations for incremental costs related to Los Osos City Sewer System Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Los Osos City Sewer System

Workgroups affected:

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

This

> Locate and Mark

Depth Checks

> Locating and Marking

> Job Observations

> Main Maintenance

> Service Maintenance

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

Labor

follows:

Methodology:

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

employees

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

Labor Assumptions:

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 [A]: Estimated number of units were derived by field assessment of the impact that the proposed proposed sewer line location will need to be altered. Additionally continuous observation will be

equired 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

Supplemental Workpaper Galculations for incremental costs related to Los Osos City Sewer System Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

	₹	[8]	<u></u>	[A x B x C]=[D]				Ш	Ш	Ш
Labor	Estimated Total Units	Hours per Order	Overtime Rate	Total Project Cost	2010	<b>2011</b> (20%)	<b>2012</b> (70%)	2010 FTE	2010 FTE 2011 FTE 2012 FTE	2012 FTE
L&M (Depth Checks)	98	12	\$ 100.71	\$ 120,156	ا چ	\$ 24,031	\$ 84,109	ó	0.2	0.8
Locating and Marking	5,763	0.21	\$ 48.26	\$ 59,304	ا چ	\$ 11,861	\$ 41,513	0	0.1	0.4
Job Observations	319	4.00	\$ 48.26	\$ 61,573	ا ن <del>ن</del>	\$ 12,315	\$ 43,101	0	0.1	0.4
Main Alterations	75	32	\$ 100.71	\$ 241,704	49	\$ 48,341	\$169,193	0	.05	1.6
Service Alterations	513	9	\$ 100.71	\$ 307,509	, \$	\$ 61,502	\$215,256	0	0.6	2.1
21121121121212	-1	,		מסט, יסט ש	,	4 01,304	9613,630	╝	2	0.0

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

	,	2012	(%02)		\$ 11,731	5	5	\$353,967	\$ 36,914	
		2011	(20%)		\$ 3,352	ا چ	5	\$101,133	\$ 10,547	
		2,00	2010		1			١.	١.	
[A×B]			-	Total per Year	16,758 \$	-	1	\$ 295,667	52,734 \$	
				Tota	s	ક્ર	မာ	\$	ક	
[8]	Avg Annual	Non Labor	Cost Per	Unit	171.00	-	-	6,742	103	
[A]	1		Estimated	Total Units	86	8 0	0	\$   52	513	
				Non Labor	L&M (Depth Checks)	Locate and Mark	Job Observations	Main Alterations	Service Alterations	
L		#	91	Liη	ဖ		ω	<u>ი</u>	힏	

# Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Federal Stimulus Funding

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

Workgroups affected:

> Locate and Mark (Depth Checks)

> Main Maintenance

> Service Maintenance

> Cathodic Protection

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

:

Total estimated work units  $\times$  2005-2009 average hours per unit  $\times$  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

Methodology:

# Supplemental Workpaper Calculations for incremental costs related to Rederal Stimulus Funding Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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

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

	[A]	[8]	D D	[AxBxC]=[D]				Ξ		9
Esumated										
Annual	_	Hours per		Overtime   Total per			-			
Units		Unit	Rate	Year	2010	2011	2012	2010 FTE	2011 FTE	2010 FTE 2011 FTE 2012 FTE
.09		. 12	\$100.71	\$72,511	\$72,511	\$72,511	\$72,511	0.7	0.7	0.7
- 21		31	\$100.71	\$53,524	\$53,524	\$53,524	\$53,524	0.5	0.5	0.5
43		6	\$100.71	\$39,528	\$39,528	\$39,528	\$39,528	0.4	.0.4	40
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.

Avg Annual
Avg Annual
Avg Annual
Avg Annual
(A)   (B)
Estimated Annual Units 60 17 43 193
or thecks) nance enance tection
Non Labor L&M (Depth Checks) Main Maintenance Service Maintenance Cathodic Protection
Ser   Rel

## Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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 das 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 Manntenance > 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:
	<u>Labor</u> 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

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

fluctuations in the completed work units over time.

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.

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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.)

	[¥]	[8]	<u>5</u>	<u>[</u>	[ÁxBxCxD]	•				_	<u> </u>	· <u>U</u>	Ш
	Total	Percent	Work	Overtime						-	├	<u> </u> [	
Labor	Orders	of Jobs	Duration	Crew Rate	Total per					- 50	2010 2	2011	2012
	per Year	Affected	(Hrs)	(3 person)	Year	2010	2011	_	2012			1	FTE
Main Mtce	2,095	1.50%	1	\$ 145.59	\$ 4,575	\$ 4.575	s	4.575	\$ 45	lic.		+-	1 5
Service Mtce	4,230	1.50%	<b>1</b> 77	\$ 145,59	\$ 9.238	\$ 9.238	. G	9 238	60 5	238	000	4	000
CP Field	3,123	1.50%	-	\$ 145.59	\$ 6.820	\$ 6.820	69	6.820	9 5	+		+-	800
L&M (Depth Checks)	994	1.50%	-	\$ 146.59	\$ 2,186	\$ 2.186	s	2.186	\$ 2.1			+-	800
										; :	;	;	10.5

		Æ	[8]	<u>ত</u>	[AxBxC]								
#		Total	Percent	Material			_						
e ət	Non-Labor	Orders		of Jobs Costs per	Total per			-					
ıίJ		per Year	per Year   Affected	Order	Year	2010		2011	2012	- 2			
S	Main Mtce	2,095	1.50%	\$ 1,720	\$ 54,051	8	s	54.051	\$	54.051			
ဖ	Service Mtce	4,230	1.50%	\$ 1,720	\$ 109,134	4 \$ 109,134	s	109,134	\$ 10	109.134			
7	CP Field	3,123	1.50%	\$ 1,720	\$ 80,573		S	80.573	69	80.573			
ω	L&M (Depth Checks)	994	1.50%	\$ 1,720	\$ 25,645	8	S	25,645	8	25.645			
딥	<b>Engineered Traffic Control Plan</b>	Plan											
		Æ	Ē	<u></u>	0	[AxBxCxD]			•			Ū	
#		Total	Percent	Work			L				}		L
! (	1040	0.00.0	0.000		•								

'		_₹	<u>6</u>	<u>ত</u>	[]	[AxBxCxD]							Ū	ũ	Ü
#		Total	Percent	Work			L						1		
Ðυ	Labor	Orders	of Jobs	Duration	Overtime	Total per							2010	2011	2012
ריִי		per Year	Affected	(Hrs)	FPA Rate	Year	_	2010		2011	20	2012		L L	L L
<u>o</u>	Main Mtce	2,128	7.00%	1	\$ 59.94	\$ 8,929	<del>(S)</del>	8.929	69	8.929	6 65 45	8 979	0	000	100
9	Service Mtce	4,230	7.00%	-	\$ 59.94	8	8	17.748	· G	17,748	17	17 748	0 17	0.0	175
Ξ	CP Field	3,123	7.00%	1	\$ 59.94	မာ	69	13.103	63	13,103	3	13 103	0 11	2 5	7
7	L&M (Depth Checks)	994	7.00%	-	\$ 59.94	es.	69	4.171	6	4 171		4 171	200		5
						-	4		١				5		5

3 of 4

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

덜	Engineered Traffic Control Plan (cont'd)	Plan (cont	ଚା							
•		[A]	<u>@</u>	ច	[AxBxC]					
#		Total		Material			┢		L	
ŧ Əl	Non-Labor	Orders	Percent	Percent Costs per	Total per					
ΊŢ		per Year	required	Order	Year	2010	_	2011		2012
5	Main Mtce	2,128	7.00%	\$ 250	\$ 37,240	\$ 37,240	940	37,240	s	37,240
4	Service Mtce	4,230	7.00%	\$ 250	\$ 74,025	\$ 74,025	325	74,025	s	74,025
15	CP Field	3,123	7.00%	\$ 250	\$ 54,653	\$ 54,653	553	54,653	S	54,653
ᅙ	L&M (Depth Checks)	994	7.00%	\$ 250	\$ 17,395 \$	\$ 17,395	395	17,395	s	17,395
•					22.	ı				* ****

Li	Limits on Construction Hours	ا2													
		M	9	[5]	(D)		[AxBxCxD]	i					<u> </u>	Ē	
		Total	Percent	Work	Overtime	шe									
Ðι	Labor	Orders	of Jobs	Duration	Crew Rate	ate	Total per						2010	2011	
!!T		per Year	Affected	(Hrs)	(2 person)	on)	Үеаг		2010		2011	2012	FTE	FTE	
17	Main Mtce	2,095	3.00%	-	\$ 100	100.71	\$ 6,330	\$	6,330	s	6.330	\$ 6.330	0.1	0.1	1
9	Š	4,733	3.00%	1	\$ 10(	100.71	\$ 14,300	\$	14,300	(c)	14,300	\$ 14,300	0.1	0.1	
<u>က</u> 		3,123	3.00%	1	\$ 100	100.71	\$ 9,436	↔	9,436	s	9,436	\$ 9,436	0.1	0.7	
8	_	994	3.00%	1	\$ 10(	100.71	\$ 3,003	69	3,003	s,	3,003	\$ 3,003	0.03	0.03	
7		21,095	17%	0.25	\$ 48	48.26	\$ 41,998	69	41,998	s	41,998	\$ 41,998	0.4	4.0	
2		17,393	16%	0.25	\$ 11.	111.66	\$ 77,401	s	77,401	G	77,401	\$ 77.401	0.8	0.8	1
ह्य	M&R-Distr Reg Sta	1,534	%00'09	9.0	\$ 11	111.66	\$ 42,822	s	42,822	s	42,822	\$ 42,822	4.0	4.0	
	Note: M&R Med MSA is single p	igle person													
		[A]	[8]	<u>ত</u>	[AxBxC]	ក									
#		Total		Material				L							
ŧ Əl	Non-Labor	Orders	Percent	Costs per	Total per	ĕ									
ΊŢ		per Year	required	Order	Year	_	2010		2011		2012				
24	Main Mtce	2,095	3.00%	099 \$	\$ 34,	34,568	\$ 34,568	\$	34,568	s	34,568				
22	Š	4,733	3.00%	\$ 220	<b>*</b> 82	78,095	\$ 78,095	s	78,095	s	78,095				
58		3,123	3.00%	\$ 220	\$ 51,	51,530	\$ 51,530	49	51,530	s	51,530				
27	L&M (Depth Checks)	994	3.00%	\$ 220	\$ 16,	16,401	\$ 16,401	s	_	s	16,401				

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

Supplemental Workpaper Galculations 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

	;	AXBXEI				9,00	7107	ç	7	0   \$148,330	0000	167,6274 861,671	7 € 72 020
	0	AXBXD]				7700	1107	455 842	1000	112,250	470 49	4 17.5	5 55 107
	10,000	[PXBXC]				2040	2010	108 533	70 474	10,1/4	120 570	140,013	38.378
	ũ	(-)	2012	Incr. NL	Costs/	Order	25.0	\$ 74.00	27.00	7 00:÷	2400	200	\$ 74.00
	. 🖻	Ξ		2011	Incr. NL	Costs/ Order		\$ 56.00	A. A. A.	3	\$ 56.00		26.00
3	ប្		2010	Incr. NL	Costs/	Order	L	\$ 39.00	\$ 39.00	1	39.00	ŀ	39.00
2011011011011101111	<u> </u>				Percent	per Year required	300	88.00%	37.00%		800.66	/000	88.00%
	₹			Total	Orders	per Year	7700	7,011	5,417	3	3,123	Š	334
				Non-Labor	j.	1 1 1	Main Maco	Mail Mile	Service Mtce	717:11 00	Cr rieid	CM (Donth Chocks)	Lam (Septil Ollecus)
	٠		_	#	əu	!7	ά	7	82	2	3	÷.	,

[AxBxE] 192.891 [AXBXD] 92,482 70,156 2010 Incr. NL Costs/ Order Costs/ Order Inc. N 2011 ϳ Costs/ Incr. N Order Percent required 94.00% 80.00% per Year Orders 2,811 ₹ Increased Paving Requirements L&M (Depth Checks) Service Mtce Non-Labor Main Mtce **CP** Field

# əni 1 2 2 2 2 2 2

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:**

Years
Labor
Non-Labor
NSE
Total
FTE

			In 20	09\$ (000)			
	Adjus	sted-Record	led		Adj	usted-Fore	cast
2005	2006	2007	2008	2009	2010	2011	2012
3,248	3,435	3,564	3,687	3,729	3,896	4,018	4,139
1	11	9	9	2	6	6	6
0	0	0	0	0	0	0	0
3,249	3,446	3,573	3,696	3,731	3,902	4,024	4,145
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	t Method	Bas	e Forecas	t	Foreca	ıst Adjustn	nents	Adjust	ed-Foreca	ast
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
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	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:**

ecast Adjustment D	etails:					
Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 (Nom	inal \$)				
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 (Cons	stant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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 Nom	inal \$ (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	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	RefID		
		· <u></u>					Kenb		
2005	24	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009082		
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		
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		
Adiustmen	t for the union	retroactive v	vage incre	ease wl	nich was charge	ed to the small tools	3111527333		
	count. Corres		-		_	ittings, & Materials			

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.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	RefID
2009	0	0	0	0.0 1-S	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:** 

Years Labor Non-Labor NSE Total

FTE

	In 2009\$ (000)									
	Adju	sted-Record	Adjusted-Forecast							
2005	2006	2007	2008	2009	2010	2011	2012			
8,948	9,180	8,718	8,377	8,821	9,798	10,101	10,107			
1,903	1,905	1,860	2,101	2,341	2,109	25,618	25,618			
0	0	0	0	0	0	0	0			
10,851	11,085	10,578	10,478	11,162	11,907	35,719	35,725			
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		Ba	se Foreca	st	Forecast Adjustments			Adjusted-Forecast		
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 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 Ad	j

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 n 153 153 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 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 1-Sided Adj 23,443 0.0 New Environmental Regulatory Balancing Account 2011 Total 1.293 23.596 24,889 12.1 2012 1,299 0 0 1.299 1-Sided Adi 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.

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.

0

2012

0

154

154

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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	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:**

ctermination of Aujuste	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 (Nor	minal \$)				
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 (Nomina	al \$)				
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 (Cor	nstant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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 Nom	inal \$ (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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	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
	count. Corres					ed to the small tools fittings, & Materials	3085624077
2009 Total	81	0	0	0.0			

**Supplemental Workpapers for Workpaper 2GD002.000** 

### Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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

Workgroups affecter Measurement and Regulation (M&R)

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

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)

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

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

[C]: Overtime rate: Medium size meter change outs are done by a single M&R Technician, while large meter operating conditions.

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]	Ø	<u>(B</u>	ច	₹	[AxBxC]=[D]	[AxBxC]=[D]	[AxBxC]=[D]	Ē	Ш	Ш
	2010	2011	2012			_						
	Annual	Annual	Annual	Hours per	Overtime					2010	2011	2012
Labor	Orders	Orders	Orders	Order	Rate		2010	2011	2012	FTE	FTE	F
edium MSAs	546	406	446	3.37	\$ 48.26	69	88.790	\$ 66.023	\$ 72.528	06.0	0.60	0.70
arge MSAs	72	200	201	3.99	\$ 111.66	49	11,709	\$ 32.524	\$ 32,686	0.2	0.4	0.3

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2 of 2

Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure Southern California Gas Company – Gas Distrubtion – Witness Gina Orozco-Mejia

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.

[AxB]			2012	1	11 435	-	F 151
					10		128 \$
[AxB]			2011		\$ 10.410		5 51
[AxB]			2010		13.999		1 846
<u>(a)</u>		Annual Cost	per Order		25.64		\$ 50.00
₹	2012	Annual	Orders		446		201
₹	2011	Annual	Orders		406		200
Æ	2010	Annual	Orders		546		72
		-	Non Labor	B. B. C. C.	SASM MISAS		4 Large MSAs

### 1 of 2

## Supplemental Workpaper Calculations for incremental costs related to Regulatory Requirements Southern California Gas Company - Gas Distrubtion -- Witness Gina Orozco-Mejia

survey. Procedural changes to the load survey provide a more accurate measure of the customer's load and result in a higher number of 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 MSA rebuilds. The calculation of the incremental costs to rebuild these MSAs are shown below. Regulatory Requirements - MSA rebuilds as a result of load survey

The cost for additional labor and non labor was calculated as follows: Measurement and Regulation (M&R) Workgroups affected: Methodology:

 $\underline{\text{Labor}}$  Annual number of MSA rebuilds  $\times$  2009 average hours per replacement  $\times$  M&R Technician overtime

crew rate.

[A]: Approximately 1600-1700 load surveys are issued annually. M&R personnel estimate that Annual number of MSA rebuilds x 2009 non labor cost per order. Non-Labor Labor Assumptions:

[D]: Overtime rate: Small and medium MSAs are done by a single M&R technician, while large MSAs Annual labor hours per unit is based upon the 2009 hours per order which represents the most approximately 50% will result in MSA rebuilds. [B]: Annual labor hours per unit is based upon are done by a 2-person M&R crew. current operating conditions.

rate. Average annual salary is \$70,000  $\times$  1.5 = \$105,000

FI: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime

Œ	Γ	2012	FTE	4.	3.9
Œ	$\vdash$	7	ᆵ	4.0	3.9
	$\vdash$	10 20	FTE	0.4	3.9
Œ		2010	ᇤ	┡	L
			2012	\$ 38,065	\$446,086
			2011	\$ 38,065	\$446,086
			2010	\$ 38,065	\$446,086
[CxD]=[E]		Total Cost	per Year	\$ 38,065	\$ 446,086
Ō	Overtime	Rate		\$ 48.26	\$ 111.66
[AxB]=[C]		Total Annual	Hours	789	3,995
(B)	Annual	Hours per	Order	4.1	6.6
Æ		Total Orders	per Year	191	609
			Labor	Medium MSA Rebuilds	Large MSA Rebuilds
ĺ		91	!!T	_	2

2 of 2

Supplemental Workpaper Calculations for incremental costs related to Regulatory Requirements Southern California Gas Company - Gas Distrubtion - Witness Gina Orozco-Mejia

Non-Labor Assumptions:

[A]: Approximately 1600-1700 road second 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.

		2012	0 550	\$ 45.675
		2011	9 550	\$ 45,675
•		2010	9 550	\$ 45,675
[AxB]=[C]	st Total Cost	per Year	\$ 9.550	\$ 45,675
@	Annual Cost	per Order	\$ 50.00	\$ 75.00
Z	Total Orders Annual Cost	per Year	191	609
		• •		
		Non Labor	Medium MSA Rebuilds	Large MSA Rebuilds
L				27

### Supplemental Workpaper Calculations for incremental costs related to Safety Southern California Gas Company - Gas Distrubtion - Witness Gina Orozco-Mejia

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 Recently SCG has moved to a more stringent application of this policy to improve public safety. The additional odorization check SCG conducts odorant testing as a safety measure to ensure that new equipment (meters, regulators, valves, etc.) connected to the houseline are odorized. time increases the cost of the work. The calculation of the incremental costs are shown below. they are properly odorized.

Workgroups affected:

Measurement and Regulation (M&R)

Methodology

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

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

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

Assumptions:

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

0 0 2012 FTE Ш 0 0 2011 FTE 叵 2010 FTE <u>-</u> Ш \$ 8,568 2012 \$ 8,568 2011 \$ 8,568 2010 8,568 Total Cost [BxC]=[D] 48.26 Overtime Rate <u></u> Annual Hours E E Orders per Total Year 3,551 Odorant Testing Medium MSA

\$49,722

\$ 49.722

49.722

111.66

Odorant Testing Large MSA

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1 of 1

### Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure Southern California Gas Company - Gas Distrubtion - Witness Gina Orozco-Mejia

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 Aging Infrastructure - Regulator Station lid and vault maintenance incremental costs to repair these vaults are shown below.

Measurement and Regulation (M&R) Workgroups affected:

Methodology:

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

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

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.

Overtime rate for a 2-person M&R crew. 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

Œ	2012	핃	0.1
Œ	2011	FTE	0.1
Œ	2010	표	0.1
		2012	\$ 6,253
		2011	\$ 6,253
		2010	\$ 6,253
[CxD]=[E]	Total Cost	per Year	\$ 6,253
0	Overtime	Hourly Rate	\$ 111.66
[AxB]=[C]	Totai Annual	Hours	56
(B)	Annual Hours	per Order	4.0
(A)	Total Orders	per Year	14
	,	Labor	Vault Repairs
	# əu	רו	_

[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. Non-Labor Assumptions:

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

15,869 2012 2011 2010 Total Cost per Year [AXB] Annual Cost per Order Ē Total Orders per Year ₹ Non Labor /auft Repa # əui7 2

### Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

that they are in good mechanical condition and adequately provide service capacity and reliable operation. Certain models of pressure Federal regulation DOT 49 C.F.R. 192.739 requires that District Reg Stations (DRS) be routinely inspected and maintained to ensure regulators that are used in DRSs have been in service for over 25 years and have become obsolete. There are approximately 1666 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. Aging Infrastructure - Replacement of regulators on Reg Stations

Workgroups affected:

Measurement and Regulation (M&R)

Methodology:

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

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.

Labor cost for regulators scheduled for replacement beginning in 2011

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 [D]: Overtime rate for M&R Technician 1 [E]: Labor cost for regulators scheduled f [F]: FTEs calculated by dividing the total

			2010 FTE 2011 FTE 2012 FTE	0 3.3 3.3
			2012	\$304,250
			2011	\$304,250
			2010	۔ چ
[CxD]=E		Total Cost	per Year	\$ 304,250
ē	M&R Tech 1	Overtime	Rate	\$ 48.26
[AxB]=[C]		Hours per Total Annual	Hours	6,305
[B]	Annual	Hours per	Order	18.9
Z	Total	Orders	per Year	334
			Labor	Regulator Replacement

### 2 of 2

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

	₹	<u>[8]</u>	[AxB]=[C]			
	Total	Annual				
	Orders	Cost per	Total Cost			
Non Labor	per Year	Order	per Year	2010	2011	2012
Regulator Replacement	334	\$ 199.75	\$ 66,637	- \$	\$ 66,637	\$66,637

## Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites Southern California Gas Company – Gas Distrubtion – Witness Gina Orozco-Mejia

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

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

Count of impacted field employees x average combined rate of impacted employees (based on Labor Agreement scheduled by local management. All impacted field employees will be expected to have recieved this training and review. Training for platform contruction and dismantling is calculated as follows: Pipeline O&M Field Support Workgroups affected: Methodology:

schedule) x training duration.

[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

	<b>A</b>	(B)	<u> </u>	$[A \times B \times C]=[D]$	=	<u>u</u>	Ш	Ш	Ē	Ē	Ē
# 9	Impacted Employee	Avg. Overtime	Training Duration								
иįТ	Count	Pay Rate	(Hrs)	Total per Year		2010	2011	2012	2010 FTE	2010 FTE 2011 FTE 2012 FTE	2012 FTE
1 Initial Instruction	620	\$ 50.77	2	\$ 62,950	જ	31,475	\$ 31,475	- &	0.5	0.5	0
2 Annual Review	620	\$ 50.77	0.5	\$ 15,737	s		\$ 7,869	\$ 7,869	0	0.04	0.04
			Tota	Total Requirement	3	21 475	\$ 29 242	2 869	20	0 54	2

2 of 2

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites Southern California Gas Company ~ Gas Distrubtion ~ Witness Gina Orozco-Mejia

Set up and Dismantling Costs

Workgroups affected:

> Main Maintenance

> Service Maintenance

> Cathodic Protection

> Measurement & Regulation

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

Labor Assumptions:

: Methodology:

[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

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

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	100	Dorog	10,01						֖֓֞֞֞֞֜֞	Ξ	(F)
	- כומ - כומ	1 2 2 2 2	VOOR	CVerime							
roup	Orders	Requiring	Duration	Crew Rate	Total per						
	per Year	Set-up	(Hrs)	(2 person)	Year	2010	2011	2042	2040 ETE	2040 ETE 2044 ETE 2040	1
40.000	1000	,,,,				2:0=	4011		2010 5	Z011 L1E	2012 F I E
renance	2,035	4.41%	35	s 100 71	32 566	\$ 32 566	\$ 32 KKK	22 66 2	C	ç	3
	100				2001	000100	02,20	4 32,300	0.0	2.0	ر د
Intenance	7,653	6.80%	3.5	\$ 100.71	\$ 183 430	\$ 183 430 1 \$ 183 430	\$ 183 430	\$182 A20	7	7	,
	00,0	,000				1001	100,400	4,00	•	<u>•</u>	0
rotection	3,123	7.90%	3,2	\$ 100.71	86 964	796 98 S	A 26 964	C 26 064	C	c	0
Chatian.	000	,,,,,,			100100	- 00,00	400,00	<b>4 00,304</b>	0.0	0.5	Š
eg. Station	. 988	46.00%	75	411 66	111 66   C 178 784   C 179 704   C 170 704   C170 704	A 170 70A	100 041 3	4470 704	,	ļ.	

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[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  $\times$  1.5 = \$105,000

# Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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.

sts are shown below.	ins on construction notis, increased construction permit costs and increased paying requirements. The calculation of these incrementa sts are shown below.
Workgroups affected:	<ul> <li>Main Maintenance</li> <li>Service Maintenance</li> <li>Cathodic Protection</li> <li>Locate and Mark (Depth Checks)</li> <li>Measurement &amp; Regulation (M&amp;R): Limits on construction hours only</li> </ul>
Methodology:	The cost for additional labor and non labor was calculated as follows:
	<u>Labor</u> 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 expense
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.

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

[B]: Based upon field assessment of the impacts on the total number of orders. [C]: Non labor costs are made up of: fluctuations in the completed work units.

Estimated 3rd party contractor labor (provided by operating district personnel)

Historical average costs for 3rd party rentals (night lights, steel plates, etc.)

	[A]	<u>B</u>	ក្	<u>0</u>	[AxBxCxD]					ũ	<u>[</u>	ū
	Total	Percent	Work	Overtime				r				
Labor	Orders	of Jobs	Duration	Crew Rate	Total per					2010	2011	2012
3 8 4 4 4	per Year	Affected	(Hrs)	(3 person)	Year	2010	2011		2012	111	H	FTE
Main Mtce	2,095	1.50%	1	\$ 145.59	\$ 4,575	\$ 4.575	\$	4.575	\$ 4.575	↓_	-	50.0
Service Mtce	4,230	1.50%	<b>L</b> 3	\$ 145,59	\$ 9.238	\$ 9.238	6	9 2 3 8	\$ 9238	-		8 0
CP Field	3,123	1.50%	1	\$ 145.59	\$ 6.820	\$ 6.820	5	6 820	6 820		ㅗ	8 6
L&M (Depth Checks)	994	1.50%	1	\$ 146.59	\$ 2.186	\$ 2.186	\$	186	2,020			3 5
						1	î	2				20.0

Aaterial	Costs per   Total per	Year 2010 2011	\$ 54,051 \$ 54,051 \$ 54,051 \$	\$ 109,134 \$ 109,134 \$ 109,134 \$	\$ 80,573 \$ 80,573 \$ 80,573 \$	\$ 25,645 \$ 25,645 \$ 25,645 \$
aterial	<u> </u>	Year 2010	5	\$ 109,134 \$ 109,134 \$ 109	\$ 80,573 \$	\$ 25,645 \$
aterial	<u> </u>	Year	\$ 54,051 \$ 54,051 \$	\$ 109,134 \$ 109,134 \$	\$	s
aterial	<u> </u>	_	\$ 54,051	\$ 109,134	\$ 80,573	\$ 25,645
aterial	ber 3		⊢			
≥	Costs	Order	\$ 1,720	\$ 1,720	\$ 1,720	\$ 1,720
_	of Jobs	Affected	1.50%	1.50%	1.50%	1.50%
lotal	Orders	per Year	2,095	4,230	3,123	994
1	Non-Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)
		Non-Labor O	Non-Labor	Non-Labor Main Mtce	Non-Labor Main Mtce	Non-Labor Main Mtce Service Mtce CP Field

Engi	igineered Traffic Control Plan	Plan											
ı		[A]	<u>@</u>	<u>ত</u>	<u> </u>	[AxBxCxD]			-		Ē	Œ	Œ
#		Total	Percent	Work							1		
Ðυ	Labor	Orders	of Jobs	Duration	Overtime	Total per					2010 2011 2012	2011	2012
 !!\		per Year	Affected	(Hrs)	FPA Rate	Year	7	2010	2011	2012	H	1	1
<u></u>	Main Mtce	2,128	%00'2	1	\$ 59.94	lθ	s	8.929	8.929	G.	0	000	18
9	Service Mtce	4,230	ı	_	\$ 59.94	8	S	17.748	17.748	6	0.17	0.00	17
<del></del>	CP Field	3,123		-	\$ 59.94	မာ	မှ	13.103	13.103	9	0 11	0 11	7
건	L&M (Depth Checks)	994	7.00%	-	\$ 59.94	160	S	4.171	4.171		1	200	1

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Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

	[AxBxC]
	<u>5</u>
ଚା	<u>(B</u>
Plan (cont	₹
Engineered Traffic Control	

[A] [B] [C] [AxBxC]	Total Material	Orders   Percent   Costs per   Total per	per Year required Order Year 2010 2011 2012	2,128 7.00% \$ 250 \$ 37,240 \$ 37,240 \$ 37,240 \$ 37,240	4,230 7.00% \$ 250 \$ 74,025 \$ 74,025 \$ 74,025 \$ 74,025	3,123 7.00% \$ 250   \$ 54,653   \$ 54,653   \$ 54,653   \$ 54,653	994   7.00%   \$ 250   \$ 17,395   \$ 17,395   \$ 17.395   \$
		Non-Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)

B    C    D			:	į											
Labor         Total Orders Orders         of Jobs Orders         Duration Orders         Crew Rate Total per Pear         Total per Pear         2010         2011         2012         F           Main Mtce         2,095         3.00%         1         \$ 100.71         \$ 6,330         \$ 6,336         \$			[A]	[B]	ට	Ē.	EXB.	[QXOX						Ш	
Labor         Orders         of Jobs         Duration         Crew Rate         Total per Pear         2010         2011         2012         F           Main Mtce         2,095         3.00%         1         \$ 100.71         \$ 6,330         \$ 6,336         \$ 6,336         \$ 6,336         \$ 6,336	#		Total	Percent	Work	Overtime		İ					•	-	-
Main Mtce         2,095         3.00%         1         \$ 100.71         \$ 6,330         \$ 6,3	: ƏL	Labor	Orders		Duration	Crew Rate	ᅼ	al per						2010	
Main Mtce         2,095         3.00%         1         \$ 100.71         \$ 6,330         \$ 14,300         \$ 1,300         \$ 1,300         \$ 1,000 <th>‼Π </th> <th></th> <th>per Year</th> <th></th> <th>(Hrs)</th> <th>(2 person)</th> <th>×</th> <th>ear</th> <th>7</th> <th>010</th> <th>20</th> <th>7</th> <th>2012</th> <th>H</th> <th><u></u></th>	‼Π 		per Year		(Hrs)	(2 person)	×	ear	7	010	20	7	2012	H	<u></u>
Service Mtce         4,733         3.00%         1         \$ 100.71         \$ 14,300         \$ 10,00         \$ 10,00         \$ 10,07 <t< th=""><th>17</th><th>휥</th><th>2,095</th><th>3.00%</th><th>1</th><th>\$ 100.71</th><th>ઝ</th><th>6,330</th><th>s</th><th>6,330</th><th>63</th><th>6,330</th><th>\$ 6,33(</th><th>╁</th><th>┞</th></t<>	17	휥	2,095	3.00%	1	\$ 100.71	ઝ	6,330	s	6,330	63	6,330	\$ 6,33(	╁	┞
CP Field         3,123         3.00%         1         \$ 100.71         \$ 9,436         \$ 9,43	9	Service Mtce	4,733	3.00%	1	_		4,300	s	14,300	s	14,300	\$ 14,300	0	F
L&M (Depth Checks)         994         3.00%         1         \$ 100.71         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 3,003         \$ 41,998         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822         \$ 42,822	<u>တ</u> 	CP Field	3,123	3.00%	1		l	9,436	s	9,436	s	9,436	\$ 9,436	0	F
M&R - Med MSA         21,095         17%         0.25         \$ 48.26         \$ 41,998         \$ 42,822         \$	8		994	3.00%	٦.	\$ 100.71		3,003	s	3,003	<del>G</del>	3,003	\$ 3,00	L	<u>ا</u>
M&R - Lrg MSA         17,393         16%         0.25         \$ 111.66         \$ 77,401         \$	7	M&R - Med	21,095	17%	0.25			1,998	S.	41,998	s	41,998	\$ 41,998		4
M&R-Distr Reg Sta   1,534   50.00%   0.5   \$ 111.66   \$ 42,822   \$ 42,822   \$ 42,822	23		17,393	16%	0.25	,	ઝ	7,401	s,	77,401	63	77,401	\$ 77,40	L	<del> </del>
	23		1,534	20.00%	0.5		\$ 4	_	LS-	42,822	s	42,822	\$ 42.82	ò	4

			2012	34,568	78,095	51,530	16,401
			2011	34,568 \$	78,095	51,530 \$	16,401 \$
			2010	\$ 34,568 \$	\$ 78,095 \$	\$ 51,530 \$	\$ 16,401 \$
[AxBxC]		Total per	Year	\$ 34,568	\$ 78,095	\$ 51,530	\$ 16,401
<u>ত</u>	Material	Costs per	Order	\$ 220	\$ 550	\$ 550	\$ 550
<u>@</u>		Percent	required	3.00%	3.00%	3.00%	3.00%
Æ	Total	Orders	per Year	2,095	4,733	3,123	994
		Non-Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)
	#	: əı	ıiΔ	24	25	8	27

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

Note: The assumptions for Increased Permit Fees and Construction Requirements and for Increased Paving Requirements are Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements

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.

\$148,330 2012 173,139 55,842 112,250 78,174 120,579 38,378 108,533 [AxBxC] 74.00 74.00 Incr. NL Costs/ Order 叵 Costs/ Order 56.00 56.00 56.00 Incr. NL · 🖻 Costs/ nc. N Increased Permit Fees and Construction Requirements Order required Percent 37.00% 99.00% 800.66 per Year Orders 2,811 5,417 L&M (Depth Checks) Non-Labor Service Mtce Main Mtce CP Field # əui 7 8 8 8 8 8

2	increased Paving Requirements	<u>ients</u>							
		₹	<u>[B]</u>	[]	[0]	Œ	[AxBxC]	[AxBxD]	[AVBVE]
				2010		2012			-
#	Non-Labor	Total		Incr. NL	2011	Incr. N			٠
əυ		Orders	Percent	Costs/	Incr. NL	Costs/			
רוִי		per Year	required	Order	Costs/ Order	Order	2040	7,700	
ç					2000/ 01901	כומנו	0107	7107	2012
7	Walli Wice	7,811	94.00%	\$ 35.00	\$ 73.00	41200	4 02 182	400 004	2000
8	Service Mtce	5 417	37 000/	00 20	1000	200	32,402	9	\$425,847
,			0,00.50	00.00	3.00	\$ 112.00	\$ 70,156	146.326	\$224 500
4	CP Field	3,123	80.00%	\$ 35.00	\$ 73.00	\$ 112.00	AAA 72	\   	2001
35	L&M (Denth Chacke)	You	/000	000		2	*****************	4 102,303	128,8724
)		334	20.00%	35.00	3.00	\$ 112.00	17 395	100 35 3	A EC CC4
								,	

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1	Southern California Gas Company
2	Gas Distribution Witness Ms. Gina Orozco-Mejia
3	Supplemental Work paper Calculations – Measurement & Regulation
4	
5	
6	SCG Gas Distribution Subpart W O&M Cost Estimate:
7	The estimated cost for upward pressure of annual labor for GHG Subpart W
8	compliance is \$23.44 million for SCG based on conducting a field survey at each
9	of the 93,270 above ground M&R sites within one year.
10	
11	This cost estimate is based on the incremental costs over and above the current
12	level of inspections performed today at these locations. The estimated
13	incremental annual maintenance cost per station is \$300 per station.
14	00 000 000 1
15	93,270 SCG sites – 15,123 sites = 78,147 SCG M&R sites requiring GHG
16	inspections
17	• 93,270 is the number of M&R sites requiring inspection to meet
18	compliance with GHG Subpart W
19	• 15,123 is the current number of schedule annual M&R site
20	inspections being conducted at SCG
21	• 78,147 is the upward pressure of additional M&R site inspections
22	A
23	$75/hr \times 8 hrs/day = 600/day or 300 dollars per M&R site$
24	• \$75/hr. is based on assumed hourly value for contractors.
25	<ul> <li>It is estimated that an inspector can conduct 2 field M&amp;R</li> </ul>
26	inspections per day.
27	<ul> <li>\$300 per M&amp;R site inspection x 78,147 M&amp;R sites = \$23.44</li> </ul>
28	million
29	
30	The total upward labor pressure for Subpart W M&R related inspections for SCG is
31	\$23.44 million
	menth time destinated excit pears and office pears a

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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:

Years
Labor
Non-Labor
NSE
Total
FTE

		·	In 20	09\$ (000)	·		
	Adjus	sted-Record	led		Adj	usted-Fore	cast
2005	2006	2007	2008	2009	2010	2011	2012
830	685	970	1,038	896	1,011	1,011	1,011
1,163	928	1,228	1,469	1,311	1,635	1,782	1,935
0	0	0	0	0	0	0	0
1,993	1,613	2,198	2,507	2,207	2,646	2,793	2,946
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 S	\$(000)				
Forecast	t Method	Bas	e Forecas	st	Foreca	ast Adjustr	nents	Adjust	ted-Foreca	ast
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 0 563 563 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 1-Sided Adj 1.3 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 128 563 691 1.3 2012 128 0 128 1-Sided Adi 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 0 716 716 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 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:**

cteriiiilation of Aujuste	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 (No	minal \$)				
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 (Nomina	al \$)				
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 (Cor	nstant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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 Nom	inal \$ (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 Adju	stments to Rec	orded:					
Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	FTE	Adj Type	From CCtr	RefID
2005	0	49	0	0.0	1-Sided Adj	N/A	TP1MTC2009082
2GD000.0	• ,	Correspon			labor expense (credit) can be f		1132142043
2005 Total	0	49	0	0.0			
which was		n in 2GD00	0.003. T	reflect	1-Sided Adj Cathodic Protec corresponding ad		TP1MTC2009082 1132945447
2006 Total	0	53	0	0.0			
which was		n in 2GD00	0.003. T	reflect	1-Sided Adj Cathodic Protec corresponding ac		TP1MTC2009082 1133102277
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

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	RefID
2008	0	72	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1133205573
which was	, ,	wn in 2GD00	0.003. T		Cathodic Protectorresponding ac		1133203373
2008 Total	0	72	0	0.0			
2009	0	49	0	0.0	1-Sided Adj	N/A	TP1MTC2010020
originally		000.003 Mair	n Mtce wo		rotection Non L o. Thus a corre	abor which was sponding	3145033670
originally adjustmer 2009 Adjustme clearing a	shown in 2GD0 nt can be found 11 nt for the union ccount. Corres	000.003 Mair in said work 0 retroactive v	n Mtce wo c group. 0 wage incre	rk group 0.0 ease wh	o. Thus a corre  1-Sided Adj  nich was charge		3145033670 TP1MTC2010050 3085517170
originally adjustmel 2009 Adjustme clearing a work grou 2009 Adjustme	shown in 2GDO  nt can be found  11  nt for the union ccount. Corres p.  0  nt for the union ccount. Corres	in said work  o retroactive vectors adj  0 retroactive vectors adj	n Mtce wo k group. 0 wage incre ustment is 0	o.0 ease whees shown 0.0 0.0	o. Thus a corre  1-Sided Adj  nich was charge in the Tools, Fi  1-Sided Adj  nich was charge	N/A d to the small tools	TP1MTC2010050

**Supplemental Workpapers for Workpaper 2GD000.006** 

## Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites Southern California Gas Company – Gas Distrubtion – Witness Gina Orozco-Mejia

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

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

Count of impacted field employees x average combined rate of impacted employees (based on Labor Agreement scheduled by local management. All impacted field employees will be expected to have recieved this training and review. Training for platform contruction and dismantling is calculated as follows: Pipeline O&M Field Support Workgroups affected: Methodology:

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

schedule) x training duration.

[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

	<b>[</b> 4]	[B]	[2]	$[A \times B \times C]=[D]$	(E)	_	Ξ		Œ	Ē	Œ	Œ
#	Impacted	Avg.	Training									
əı	Employee	Overtime	Duration									
ָרוֹי <b>ר</b>	Count	Pay Rate	(Hrs)	Total per Year	2010		2011	_	2012	2010 FTE	2010 FTE 2011 FTE 2012 F	2012 FTE
1 Initial Instruction	620	22.05	7 2	\$ 62,950	છે જ	31,475	\$ 31,475	5		0.5	0.5	0
2 Annual Review	620	\$ 50.77	7 0.5	\$ 15,737	\$	-	\$ 7,869	<del>\$</del>	7,869	0	0.0	
			Tota	Total Requirement	\$ 3.	31,475	\$ 39,343	3	7,869	9.0	0.54	0.04

2010 FTE 2011 FTE 2012 FTE

匞

1.8 0.8

\$183,430 \$ 32,566 \$ 86,964 \$178.784

> \$ 178,784 183,430

\$ 32,566

Requiring Percent

Work Group

Ē

Set-up

per Year Orders o Sal

46.00%

M&R-Dist. Reg. Station Cathodic Protection Service Maintenance Main Maintenance

8.0

are less complex for M&R work, the configuration requirements are signficantly less; therefore, M&R work was estimated Total Orders x Estimated percent of total orders requiring DiRA application x Estimated hours to set-up and dismantle took the manufacturer to set up the equipment during a demonstration (1.75 hours set up only). Since field conditions [C]: Estimated hours to set up related equipment for these orders is 3.5 hrs. This figure was determined by the time it [F]: FTEs calculated by dividing the total incremental labor dollars by the average annual salary at the overtime rate. The average hourly rate was Incremental time for platform contruction and dismantling is calculated as follows: [B]: Estimated percent of total orders that will require the additional pedestrian access barricades. Based on \$ 32,566 \$ 183.430 [A]: Orders based on 2005-2009 average number of completed orders 32,566 183,430 [AxBxCxD]=[E] Total per Year to take half the time to set up and dismantle (1.75 hrs) local field managements assessment of the impact Average annual salary is \$70,000 x 1.5 = \$105,000 Overtime Crew Rate 100.71 (2 person) equipment x Overtime Crew Rate (2 person) 回 Duration

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

> Measurement & Regulation

Labor Assumptions:

: Methodology:

> Service Maintenance

> Main Maintenance

Set up and Dismantling Costs

Workgroups affected:

> Cathodic Protection

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

2 of 2

# Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Federal Stimulus Funding

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

Workgroups affected:

> Locate and Mark (Depth Checks)

> Main Maintenance

> Service Maintenance

> Cathodic Protection

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

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 <u>orders</u> or <u>miles of Main</u>

1 of 2

Methodology:

# Supplemental Workpaper Calculations for incremental costs related to Rederal Stimulus Funding Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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

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

	[A]	<u>@</u>	ប្រ	[AxBxC]=[D]		. •		Ū	Œ	<u> </u>
	Estimated									
	Annual	Hours per	Overtime	Overtime Total per			•			
Labor	Units	Cuit	Rate	Year	2010	2011	2012	2010 FTE 2011 FTE 2012 FTE	2011 FTE	2012 FTF
L&M (Depth Checks)	. 09	. 12	\$100.71	\$72,511	\$72,511	-	Т	0.7	70	70
2 Main Maintenance	- 21	31	\$100.71	\$53,524	\$53.524	1	\$53.524	0.5	0.5	
3 Service Maintenance	43	တ	\$100.71	\$39,528	\$39.528	\$39.528	1.	0.4	0.4	40
Cathodic Protection	193	1.28	\$ 48.26	\$11,962 \$11,962	\$11,962	\$11,962		0.2	0.2	0.0

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.

Avg Annual
Avg Annual
Avg Annual
Avg Annual
(A)   (B)
Estimated Annual Units 60 17 43 193
or thecks) nance enance tection
Non Labor L&M (Depth Checks) Main Maintenance Service Maintenance Cathodic Protection
Ser   Rel

exbeuses

# Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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.

osts are shown below.	The calculation of the state of
Workgroups affected:	<ul> <li>Main Maintenance</li> <li>Service Maintenance</li> <li>Cathodic Protection</li> <li>Locate and Mark (Depth Checks)</li> <li>Measurement &amp; Regulation (M&amp;R): Limits on construction hours only</li> </ul>
Methodology:	The cost for additional labor and non labor was calculated as follows:
	<u>Labor</u> Total average orders from 2005-2009 x estimated percent of orders impacted x estimated work duration x overtime crew rates <u>Non-Labor</u> Total average orders from 2005-2009 x estimated percent of orders impacted x estimated non labor expense
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.

[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  $\times$  1.5 = \$105,000 restrictions.

[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

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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.)

	[¥]	[8]	<u></u>	<u>5</u>	[AxBxCxD]							Ü	<u>U</u>	Ш
	Total	Percent	Work	Overtime										
Labor	Orders	of Jobs	Duration	Crew Rate	Total per		•					2010	2011	2012
3.3.4.4	per Year	Affected	(Hrs)	(3 person)	Year		2010		2011	7	2012	FIE	E	FIE
Main Mtce	2,095	1.50%	1	\$ 145.59	\$ 4,575	s	4.575	S	4.575	₩,	ķ		500	0 05
Service Mtce	4,230	1.50%	177	\$ 145.59	\$ 9.238	es.	9.238	G	9 238	· ·	9 238	000		8 0
CP Field	3,123	1.50%	-	\$ 145.59	\$ 6,820	S	6.820	S	6.820	. Us	6.820	0.00	0.00	000
L&M (Depth Checks)	994	1.50%	1	\$ 146.59	\$ 2.186	69	2.186	69	2.186	· U		000	200	3 6
							20.61	١.	-,,-	•		,	9	2

			2012	54.051	109.134	80,573	25,645
	Ĺ			s	S	မာ	8
			2011	54,051	109,134	80.573	25,645
				s	49	69	s
			2010	\$ 54,051	\$ 109,134	\$ 80,573	\$ 25,645
[AxBxC]		Total per	Year	54,051	109,134	\$ 80,573	\$ 25,645
<u>ত</u>	Material	Costs per	Order	\$ 1,720	\$ 1,720	\$ 1,720	\$ 1,720
[8]	Percent	of Jobs	Affected	1.50%	1.50%	1.50%	1.50%
₹	Total	Orders	per Year	2,095	4,230	3,123	994
		Non-Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)

3 of 4

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

Supplication of the period of the filtering of the filter	i incremental costs refated to Ancreased City/Municipalit	y Ke
Engineered Traffic Control Plan (cont'd)		

									<u> </u>		2010	H	0.1	0.1	0.1	0.03	0.4	0.8	4.0									
												2012	\$ 6,330	\$ 14,300	\$ 9,436	\$ 3,003	\$ 41,998	\$ 77,401	\$ 42,822									
			2012	37.240	74.025	54,653	17,395					2011	6,330	14,300	9,436	3,003	41,998	77,401	42,822					2012	34,568	78,095	51,530	16,401
				<del>ss</del>	<del>s</del>	s	s			L			s	s	s	υA	s	s	s						s	s	43	S
			2011	37,240	74,025	54,653	17,395	:				2010	6,330	14,300	9,436	3,003	41,998	77,401	42,822					2011	34,568	78,095	51,530	16,401
				s	s	s	s						\$	\$	\$	<del>ss</del>	\$	s	\$						\$	s	\$	<del>s</del>
			2010	\$ 37,240	\$ 74,025	\$ 54,653	\$ 17,395		[AxBxCxD]		Total per	Year	\$ 6,330	\$ 14,300	\$ 9,436	\$ 3,003	\$ 41,998	\$ 77,401	\$ 42,822			1		2010	\$ 34,568	\$ 78,095		\$ 16,401
[AxBxC]		Total per	Year	37,240	74,025	54,653	17,395		<u>e</u>	Overtime	Crew Rate	(2 person)	100.71	100.71	100.71	100.71	48.26	111.66	111.66		[AxBxC]		Total per	Year	34,568	78,095	51,530	16,401
<u>ত</u>	Material	Costs per	Order	\$ 250 \$	\$ 250 \$	\$ 250 \$	\$ 250 \$		<u>5</u>	_	Duration C	(Hrs) (	1 \$	1   \$	1 5	$\exists$	0.25   \$	0.25	0.5		<u>ত</u>	Material	Costs per	Order	\$ 220 \$	\$ 220 \$	550	\$ 220 \$
<u>@</u>		Percent	required	%00.7	%00.7	7.00%	7.00%	:	[B]	Percent	of Jobs	Affected	3.00%	3.00%	3.00%	3.00%	17%	16%	50.00%		<u>@</u>		Percent	required	3.00%	3.00%	3.00%	3.00%
M	Total	Orders	per Year	2,128	4,230	3,123	994	<u>e</u>	[M]	Total	Orders	per Year	2,095	4,733	3,123	994	21,095	17,393	1,534	person	Ø	Total	Orders	per Year	2,095	4,733	3,123	994
		Non-Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)	Limits on Construction Hours			Labor			Service Mtce					M&R-Distr Reg Sta	Note: M&R Med MSA is single person			Non-Labor		Main Mtce	Service Mtce		L&M (Depth Checks)
	#	ŧ Əl	ıΊΠ	<u> </u>	14	5	<u>년</u>	Limi	'	#	əu	!T	7	<u>~</u>	<u>ත්</u>	ឧ	2	ส		_		#	: əu	<u>''</u>	<del>2</del> ,	25	56	27

Supplemental Workpaper Galculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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.

\$148,330 2012 173,139 55,842 112,250 78,174 120,579 38,378 108,533 [AxBxC] 74.00 74.00 Incr. NL Costs/ Order 叵 Costs/ Order 56.00 56.00 56.00 Incr. NL · 🖻 39.00 Costs/ nc. N Increased Permit Fees and Construction Requirements Order required Percent 37.00% 99.00% 800.66 per Year Orders 2,811 5,417 L&M (Depth Checks) Non-Labor Service Mtce Main Mtce CP Field # əui 7 8 8 8 8 8

길	ncreased Paving Requirements	ients							
		M	<u>@</u>	<u> </u>	<u>0</u>		[AvRvC]	ניאם אַלַ	į.
				2010		2012	(avera)	[Oxoxo]	[AXBXE]
#	Non-I abor	Total		Incr. NL	2011	Incr. N			
əu	1000	Orders	Percent	Costs/	Incr. NL	Costs/			
Ψ.		per Year	required		Costs/ Order	) July	2040	7,700	
ç		3			10000	1200	2010	2011	2012
7		2,811	94.00%	\$ 35.00	3 73.00	\$ 112.00	\$ Q2 482	400 004	6205 042
ဗ္ဗ	Service Mtce	5.417	37.00%	۱۴	72.00	44200	404,404	-   ·	\$232,342
37	רופים מט	30,00	2000	•	4 3.00	00.21	<b>⊅</b> /0,156	46,326	\$224.500
)		3,123	80.00%	\$ 35.00	\$ 73.00	\$ 112.00	VVV 28 5	400 000	6070 001
35	L&M (Denth Charke)	You	/000	Ľ		3	*****	4 102,303	128,8724
)		100	30.00%	35.00	3.00	\$ 112.00	17.395	36 284	C SE CCA
								97.00	

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:**

Years Labor Non-Labor NSE Total FTE

In 2009\$ (000)									
	Adjus	sted-Record	led		Adj	usted-Fore	cast		
2005	2006	2007	2008	2009	2010	2011	2012		
6,110	5,202	4,594	4,492	4,887	5,163	5,211	5,332		
1,776	1,599	1,585	1,267	1,800	1,944	2,193	2,599		
0	0	0	0	0	0	0	0		
7,886	6,801	6,179	5,759	6,687	7,107	7,404	7,931		
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 \$	6(000)				
Forecast	Method	Bas	e Forecas	st	Foreca	ıst Adjustı	ments	Adjust	ted-Foreca	ast
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 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

2012

275

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

Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	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

275

1-Sided Adi

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:**

ctermination of Adjustee	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 (Non	ninal \$)				
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 (Nomina	l \$)				
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 (Con	stant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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 Nor	minal \$ (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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type	From CCtr	RefID
2005	0	-49	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 1131858507
•	,				bor expense. Co athodic Protection		1101000007
2005	-24	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009082 8143940987
					leakage survey ase in said work	work in the Leak group.	
2005	562	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3142845363
•		•			y mapped to Ser ease) in said wo		
2005	0	0	0	8.1	1-Sided Adj	N/A	TP1MTC2009090 3143141460
•			•		as incorrectly ma ng adjustment in	pped to service said work group.	
2005	0	125	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3143519293
to Service		work group 2			expense being i orresponding ad	ncorrectly mapped justment	0.000
2005	0	-615	0		1-Sided Adj	N/A	TP1MTC2010012 8141344657
One sided	adjustment to	r creaits for	casn collec	ziea ro	r main damages	wnich were	

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.	<u>Labor</u>	<u>NLbr</u>	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
appropriat	tely reflected in	Cathodic P	otection v	vork gro	oor expense which oup. Thus a con athodic Protection	responding	1102133333
2006	267	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009090
	nce work group				ncorrectly mappe g adjustment (de		3144926487
2006	0	0	0	4.4	1-Sided Adj	N/A	TP1MTC2009090 3145038490
	o Service Main				e labor which wa oonding adjustm	as incorrectly ent (decrease) in	0140000430
2006	0	107	0	0.0	1-Sided Adj	N/A	TP1MTC2009090
Adjustmer to Service (decrease	3145211257						
2006	0	-1,238	0	0.0	1-Sided Adj	N/A	TP1MTC2010012
originally s be combir	shown in cost of	center 2200- ain damage e	2092. Thi expenditur	s adjus es in th	ne correct work g	for the credits to	8141654740
2006 Total	267	-1,184	0	4.4			
2007	0	-54	0	0.0	1-Sided Adj	N/A	TP1MTC2009082
appropriat	tely reflected in	Cathodic Pi	otection v	vork gro	oor expense which oup. Thus a corr athodic Protection	responding	1133031930
2007	0	-950	0	0.0	1-Sided Adj	N/A	TP1MTC2010012 8141841537
originally s be combir	shown in cost o	center 2200- ain damage e	2092. Thi expenditur	s adjus es in th	ne correct work o	for the credits to	0141041057

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
					<u>Auj Type</u>	<u>110111 CCtt</u>	Kelib
2007 Total	0	-1,004	0	0.0			
appropria	tely reflected in	n Cathodic Pi	rotection w	non lab ork gro	1-Sided Adj oor expense whi oup. Thus a cor athodic Protection	responding	TP1MTC2009082 1133140997
2008	19		n 2 <b>G</b> D000.		1-Sided Adj	N/A	TP1MTC2009082
reflected i	nt (increase) to	reflect Main group 2GD00	00.003. Cc	oense v	which should be	appropriately nt (decrease) can	1150142307
2008	0	-949	0	0.0	1-Sided Adj	N/A	TP1MTC2010012 8142049277
originally : be combir	shown in cost	center 2200- ain damage e	2092. This expenditure	adjus es in th	ne correct work of	for the credits to	
2008 Total	19	-1,022	0	0.0			
originally : be combir	shown in cost	center 2200- ain damage e	2092. This expenditure	eted for adjus es in th	ne correct work (	for the credits to	TP1MTC2010012 8143122117
2009	0	-49	0	0.0	1-Sided Adj	N/A	TP1MTC2010020
originally		Mtce workgr	oup. A co		Protection Non L nding adjustmer	abor which was nt can be found in	3144732103
2009	61	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050
	ccount. Corre					d to the small tools ttings, & Materials	3085242813
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050
-	ccount. Corre		-		_	d to the small tools ttings, & Materials	3111909530

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.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	RefID
2009	0	0	0	0.0 1	-Sided Adj	N/A	TP1MTC2010050 3112020003
•	ccount. Corre		•		•	d to the small tools ittings, & Materials	
2009	0	0	0	0.0 1	-Sided Adj	N/A	TP1MTC2010050
•	ccount. Corre		•		•	d to the small tools ittings, & Materials	3113045633
2009 Total	61	_A35	0	0.0			

**Supplemental Workpapers for Workpaper 2GD000.003** 

### Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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 fraffic control plans
limits on construction hours, increased construction permit costs and increased paving requirements. The calculation of these incremental
costs are shown below.

	<ul> <li>Main Maintenance</li> <li>Service Maintenance</li> <li>Cathodic Protection</li> <li>Locate and Mark (Depth Checks)</li> <li>Measurement &amp; Regulation (M&amp;R): Limits on construction hours only</li> </ul>	The cost for additional labor and non labor was calculated as follows:	<u>Labor</u> 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	[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.
Workgroups affected:	• • • • • • • • • • • • • • • • • • •	Methodology:		Labor Assumptions:

[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  $\times$  1.5 = \$105,000

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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.)

Ū		2011   2012	H H		2	800		
· [ <u>[</u>	Į.	2011	FIE	0.05	0			
ũ		2010	FTE	0.05	2	900	0.02	
			2012	4.575	9 238	6 820	2.186	1
	ļ		7	€9	· v	· U	· S	ŀ
			2011	4.575	9.238	6.820	2,186	
				s	w	69	8	
			2010	4.575	9.238	6.820	2,186	
				s	s	S	4	
[AxBxCxD]		Total per	Year	4,575	9.238	6.820	2,186	
.₹	L	<u> </u>		S	<del>()</del>	မာ	63	
5	Overtime	Crew Rate	(3 person)	\$ 145.59	\$ 145.59	\$ 145.59	\$ 146.59	
<u>ত</u>	Work	Duration	(Hrs)	. 1	173	-	1	
<u></u>	Percent	of Jobs	Affected	1.50%	1.50%	1.50%	1.50%	
[A]	Total	Orders	per Year	2,095	4,230	3,123	994	
		Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)	

			2012	54.051	109,134	80.573	25,645
	ĺ			s	G	G	· G
			2011	54.051	109,134	80.573	25,645
	İ			49	s	s	s
			2010	\$ 54,051	\$ 109,134	\$ 80,573	\$ 25,645
[AxBxC]		Total per	Year	54,051	109,134	80,573	25,645
		<u>.</u>		क	8	<del>()</del>	ક્ક
<u>ত</u>	Material	Costs per	Order	\$ 1,720	\$ 1,720	\$ 1,720	\$ 1,720
<u>@</u>	Percent	of Jobs	Affected	1.50%	1.50%	1.50%	1.50%
₹	Total	Orders	per Year	2,095	4,230	3,123	994
		Non-Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)
l	#	Ðυ	 !!]	2	ᇹ	_	<del>_</del>

Total Total Yes 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15
Amount         Factor         Factor<
trees of Jobs Duration Over Affected (Hrs) FPA (Hrs) FPA (128 7.00% 1 \$\frac{1}{5}\$.123 7.00% 1 \$\frac{1}{5}\$.994 7.00% 1 \$\frac{1}{5}\$.
El   El   El     El       El
(A) otal otal rders / 128 / 128 / 123 / 12
Labor Main Mtce Service Mtce CP Field L&M (Depth Checks)

3 of 4

Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

<u>li</u>	Engineered Traffic Control Plan (cont'd)	Plan (cont	<u>ə</u>								
		[A]	<u>@</u>	ច	[AxBxC]						
#		Total		Material				L		L	
ŧ əı	Non-Labor	Orders	Percent	Percent Costs per	Total per						
ΊĮ		per Year	required	Order	Year	<u>~</u>	2010		2011		2012
5	Main Mtce	2,128	%00'.	\$ 250	\$ 37,240	שן	37,240	s	37,240	s	37.240
4	Service Mtce	4,230	%00'.	\$ 250	\$ 74,025	\$	74,025	s	74,025	s	74.025
5	CP Field	3,123	7.00%	\$ 250	\$ 54,653	s	54,653	s	54,653	65	54,653
16	L&M (Depth Checks)	994	7.00%	\$ 250	\$ 17,395 \$ 17,395	\$	17,395	s	17.395	S	17.395

Ë	Limits on Construction Hours	왼											
		[A]	[B]	[0]	[0]	[AxBxCxD]						Ш	Ξ
#		Total	Percent	Work	Overtime								
Ðυ	Labor	Orders	of Jobs	Duration	Crew Rate	Total per						2010	2011
!!T		per Year	per Year Affected	(Hrs)	(2 person)	Year		2010	•	2011	2012	FTE	F
17		2,095	3.00%	1	\$ 100.71	\$ 6,330	<del>\$</del>	6,330	s	6,330	\$ 6,330	0.1	ò
<u>∞</u>	Š	4,733	3.00%	1	\$ 100.71	\$ 14,300	s	14,300	s	14,300	\$ 14,300	0.1	ö
<u>6</u>		3,123	3.00%	1	\$ 100.71	\$ 9,436	\$	9,436	s	9,436	\$ 9,436	0.1	ö
20	اد	994	3.00%	٦	\$ 100.71	\$ 3,003	<del>\$\$</del>	3,003	ss.	3,003	\$ 3,003	0.03	0.0
7		21,095	17%	0.25	\$ 48.26	\$ 41,998	<del>\$\$</del>	41,998	s	41,998	\$ 41,998	0.4	ŏ
23	M&R - Lrg MS	17,393	16%	0.25	\$ 111.66	\$ 77,401	<del>ss</del>	77,401	G.	77,401	\$ 77,401	0.8	õ
23	M&R-Distr Reg Sta	1,534	20.00%	0.5	\$ 111.66	\$ 42,822	<b>€</b> >	42,822	s	42.822	\$ 42.822	0.4	ŏ
	Note: M&R Med MSA is single person	oerson											
		[A]	[8]	[]	[AxBxC]								
#		Total		Material									
Ðι	Non-Labor	Orders	Percent	Costs per	Total per								
רוִי		per Year	per Year required	Order	Year	2010		2011	•	2012			
24		2,095	3.00%	\$ 220	\$ 34,568	\$ 34,568	\$	34,568	s	34,568			
22	Š	4,733	3.00%	\$ 550	\$ 78,095	\$ 78,095	₩.	78,095	s	78,095			
28	1	3,123	3.00%	\$ 550	\$ 51,530	\$ 51,530	₩.	51,530	s	51,530			
27	L&M (Depth Checks)	994	3.00%	\$ 550	\$ 16,401	\$ 16,401	<del>⇔</del>	16,401	s	16,401			
									ĺ				

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

Note: The assumptions for Increased Permit Fees and Construction Requirements and for Increased Paving Requirements are Supplemental Workpaper Galculations for incremental costs related to Increased City/Municipality Requirements

different from the assumptions above.

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. Non Labor Assumptions: [A]: Projected orders based on 2005-2009 average number of completed units of work. Using an average

Increased Permit Fees and Construction Requirements

(A)
Total
Orders   Percent
er Year required
2044 1 00 000/
7
5,417   37.00%   3
Г
3,123   89.00%   \$
/000 00
1

ncre	Increased Paving Requirements	ents							
L		₹	<u>[</u>	<u>ত</u>	0	Ш	[AxBxC]	וחאמאלו	0.47
		-		2010		2012		[Ovow]	[wexe]
#	Non-Labor	Total		Incr. NL	2011	Incr. N			٠
əu		Orders	Percent	Costs/	Incr. NL	Costs/			
 !!		per Year	per Year   required	Order	Costs/ Order	Order	2040	7,00	!
S	Manin Sate	į			10000	כומנו	2010	7107	2012
7	MAIN WICE	7,811	94.00%	\$ 35.00	\$ 73.00	\$ 112.00	\$ 02 482	400 004	000
8	Service Mtce	5 417	37 000%	200	- 6	200	32,402	9	\$425,847
Ļ	i do		0,00.10	22.00	4 3.00	\$ 112.00	\$ 70,156	\$ 146.326	\$224 500
չ _T	CP Field	3,123	80.08	\$ 35.00	\$ 73.00	\$ 112.00	\$ 87 AAA		1000
35	L&M (Denth Chacke)	è	/000	000				4 102,303	128,8724
}	cam (acput offerns)	426	20.00%	35.00	3.00	S 11200 -	17 305	¥ 36 304	9 50 00
								֡֜֜֜֜֜֜֜֜֜֓֜֓֜֓֜֓֜֜֜֜֜֓֓֓֜֜֜֜֓֓֓֜֜֜֜֓֓֓֜֜֓֜֓	

### Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites Southern California Gas Company – Gas Distrubtion – Witness Gina Orozco-Mejia

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

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.

Count of impacted field employees x average combined rate of impacted employees (based on Labor Agreement Training for platform contruction and dismantling is calculated as follows: Pipeline O&M Field Support Workgroups affected: Methodology:

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

schedule) x training duration.

[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

	<b>[</b> 4]	[B]	ටු	$[A \times B \times C]=[D]$	Θ	Ш	Ш	E	Œ	Œ
# <del>0</del> 1	Impacted Employee	Avg. Overtime	Training Duration							
ָרוֹיר 	Count	Pay Rate	(Hrs)	Total per Year	2010	2011	2012	2010 FTE	2010 FTE 2011 FTE 2012 FTE	2012 FTE
1 Initial Instruction	620	\$ 50.77	2	\$ 62,950	\$ 31,475	\$ 31,475	- چ	0.5	0.5	0
2 Annual Review	620	\$ 50.77	9.0	15,737	\$	\$ 7,869	\$ 7,869	0	0.0	0.04
			Total	Total Requirement	54718	5 39 343	588 7	40	0.54	

1 of 2

2 of 2

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites Southern California Gas Company ~ Gas Distrubtion ~ Witness Gina Orozco-Mejia

Set up and Dismantling Costs

Workgroups affected:

> Main Maintenance

> Service Maintenance

> Cathodic Protection

> Measurement & Regulation

Total Orders x Estimated percent of total orders requiring DiRA application x Estimated hours to set-up and dismantle The average hourly rate was Incremental time for platform contruction and dismantling is calculated as follows:

equipment x Overtime Crew Rate (2 person)

Labor Assumptions:

: Methodology:

[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

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

	_							_	_		_
<u> </u>			1	2012 F I E	0	2.0	7	<u>o:</u>		S.S	,
Ĺ			77.1	2011 F1E	0	5.5	10	<u>o:</u>	C	0.5	,
Œ			2040 575 2044 575 2040 575	2010 616	0.0	0.0	4.0	0.1	0	0.0	7 7
			2012	2012	\$ 22 KEE	1	\$183 430	, C.	750 28 3	+ 00,00 +	4479 794
			2011	ı	32 566	V.,000	\$ 183 430	200, 100	790 98 8	+00,00	2 178 784
-			2010	20:02	\$ 32.566	,	183,430   \$ 183,430   \$ 183,430	2016	\$ 86 964	- 00,00	178 784   \$ 178 784   \$ 178 784   \$ 178 784
[AxBxCxD]=[E]		Total per	Year		\$ 32.566	201	\$ 183,430		\$6.964	100100	\$ 178 784
<u></u>	Overtime	Crew Rate	(2 person)		100.71		\$ 100.71		10071		s 111.66 L s
[0]	Work	Duration	(Hrs)		3.5		3.5		S,		1.75
[8]	Percent	Requiring Duration	Set-nb	, ,,,,	4.41%	,000	6.80%	1	%08.7	10000	46.00%
Æ	Total	Orders	per Year	1000	2,095	7 070	7,053	0010	3,6		1,989
		Work Group		Main Maintonana	Main Maintenance	Commission Marinton	Sei vice mallilenance	Cothodio Drotostion	ספרווסחור ב וחוברווסנו	Wan Dict Dea Chatter	MONT-DIST. Rey. STATION
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### Supplemental Workpaper Calculations for incremental costs related to Los Osos City Sewer System Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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

This

Workgroups affected:

> Locate and Mark

Depth Checks

> Locating and Marking

> Job Observations

> Main Maintenance

> Service Maintenance

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

Labor

follows:

Methodology:

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

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

Labor Assumptions:

Non-Labor employees

[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

equired 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

Supplemental Workpaper Galculations for incremental costs related to Los Osos City Sewer System Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

	Z	[8]	<u>ত</u>	[A × B × C]=[D]				Ш	Ш	Ш
Labor	Estimated Total Units	Hours per Order	Overtime Rate	Total Project Cost	2010	<b>2011</b> (20%)	<b>2012</b> (70%)	2010 FTE	2010 FTE 2011 FTE 2012 FTE	2012 FTE
L&M (Depth Checks)	86	12	\$ 100.71	\$ 120,156	5	\$ 24,031	\$ 84,109	ö	0.2	0.8
ocating and Marking	5,763	0.21	\$ 48.26	\$ 59,304	- \$	\$ 11,861	\$ 41,513	0	0.1	0.4
Job Observations	319	4.00	\$ 48.26	\$ 61,573	<del>1</del>	\$ 12,315	\$ 43,101	0	0.1	0.4
Main Alterations	75	32	\$ 100.71	\$ 241,704	- \$	\$ 48,341	\$169,193	0	. 0.5	1.6
Service Alterations	513	9	\$ 100.71	\$ 307,509	ا چ	\$ 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

	2012 (70%)		3,352 \$ 11,731	5	5	\$353,967	\$ 36,914
	2011	2011			- \$	\$101,133	\$ 10,547
	2010		-	·	-	۱ <del>چ</del>	
[A×B]	>	lotal per Year	16,758	1	ı	505,667	52,734
[8]	iual oor er	OUIL	171.00 \$	€	-	6,742 \$	103 \$
[A]		I Otal Units	\$ 86	\$ 0	0 \$	75 \$	513 \$
		NOIL LADOF	L&M (Depth Checks)	Locate and Mark	Job Observations	Main Alterations	Service Alterations
Į	# əui	_ 7	ၑ	7	<u>ω</u>	<u>0</u>	딜

# Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

### Federal Stimulus Funding

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

Workgroups affected:

> Locate and Mark (Depth Checks)

> Main Maintenance

> Service Maintenance

> Cathodic Protection

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

1 abor

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

Methodology:

# Supplemental Workpaper Calculations for incremental costs related to Rederal Stimulus Funding Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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

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

ш			2010 FTE 2011 FTE 2012 FTE	70	0.5	0.4	00 00
Ü			E 2011 F	-	0.5		0.2
Ξ			2010 FT	o			
		-	2012	\$72.511	\$53.524	\$39,528	\$11.962
			2011	\$72.511	\$53,524	\$39,528	\$11,962
			2010	\$72,511	\$53,524	\$39,528	\$11,962
[AxBxC]=[D]		Overtime Total per	Year	\$72,511	\$53,524	\$39,528	\$11,962
ទ		Overtime	Rate	\$100.71	\$100.71	\$100.71	\$ 48.26
[8]		Hours per	Unit	. 12	31	6	1.28
[A]	Estimated	Annual	Units	. 09	- 21	43	193
			Labor	L&M (Depth Checks)	Main Maintenance	Service Maintenance	Cathodic Protection

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 × B]   [A		_					_	_	_
Estimated Non Labor Annual Cost Per Total per 60 \$ 171.00 \$10,260 \$10,					2012	\$10.260	\$12.081	\$ 7,399	\$20,762
Avg Annual			-		2011	\$10.260	\$12.081	\$ 7,399	\$20,762
Avg Annual					2010	\$10.260	\$12.081	\$ 7.399	\$20,762
[A] [B] Avg Annual Estimated Non Labor Annual Cost Per Units Unit 60 \$ 171.00 17 \$ 710.63 43 \$ 172.08 193 \$ 107.58	[A × B]			Total per	Year	\$10,260	\$12.081	\$ 7,399	\$20,762
Estimated Annual Units 60 17 17 43	[B]	Avg Annual	Non Labor	Cost Per	Unit	\$ 171.00	\$ 710.63	\$ 172.08	\$ 107.58
Non Labor M (Depth Checks) ain Maintenance vice Maintenance	[ <b>A</b> ]		Estimated	Annual	Units	09	17	43	193
					Non Labor	L&M (Depth Checks)	Main Maintenance	Service Maintenance	Cathodic Protection
	L		#	əι	برا الا	S	ø	7	<del></del>

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:**

Years
Labor
Non-Labor
NSE
Total
FTF

In 2009\$ (000)											
	Adjus	Ad	justed-Fore	cast							
2005	2006	2007	2008	2009	2010	2011	2012				
10,356	10,306	9,807	9,515	9,978	10,256	10,477	10,630				
444	-885	-980	-924	183	-15	106	246				
0	0	0	0	0	0	0	0				
10,800	9,421	8,827	8,591	10,161	10,241	10,583	10,876				
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			Foreca	Forecast Adjustments			Adjusted-Forecast		
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	2010	<u>2011</u>	<u>2012</u>	
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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	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 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.	<u>Labor</u>	<u>NLbr</u>	NSE	<u>Total</u>	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

Category-Sub: 6. Service Maintenance

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:**

termination of Aujustea	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 (Nom	inal \$)				
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 (Cons	stant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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: 6. Service Maintenance

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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	FTE	Adj Type	From CCtr	<u>ReflD</u>				
2005	-562	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3143853830				
Maintenar	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				
Service M	` '	k group 2G	D000.004.			orrectly mapped to ment (increase) in	0111000001				
2005	0	0	0	-7.8	1-Sided Adj	N/A	TP1MTC2009110 5104256583				
Mtce work	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				
The transf	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

Category: A. Field Operations & Maintenance

Category-Sub: 6. Service Maintenance

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

Year/Expl.	<u>Labor</u>	<u>NLbr</u>	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
Maintenar	,	2GD000.00	4. Corres		abor incorrectly r ng adjustment (ir	mapped to Service ncrease) in Main	0110020000
2006	0	-107	0	0.0	1-Sided Adj	N/A	TP1MTC2009090 3145628407
Maintenar	,	2GD000.00	_		•	mapped to Service ncrease) in Main	3143020407
2006	0	0	0	-4.4	1-Sided Adj	N/A	TP1MTC2009110 5104411067
	group 2GD00					apped to Service in Main Mtce work	3104411007
2006	0	-1,354	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 4111202267
2200-2093 credits for	2. The transfe	r will combined in the service	e damage ce mainte	e labor a	sferred from cos and non labor ex work group. Co	penses with the	4111202207
2006	1,341	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020
	of MSA mainte parging of this	•	se from 2	GD000	.000 to align yea	ars 2005-2007 with	8105801900
2006	0	86	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8105926353
	of MSA mainte s 2005-2007 v					Mtce work group to	0100920000
2006	0	0	0	21.1	1-Sided Adj	N/A	TP1MTC2010020 8110051150
	of MSA mainte s 2005-2007 v	•				Mtce work group to	0110051130
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	<u>NSE</u>	FTE	Adj Type	From CCtr	RefID
2007	0	-1,652	0		1-Sided Adj	N/A	TP1MTC2010020
2200-209 credits for	<ol><li>The transfer</li></ol>	will combine in the service	damage	labor	nsferred from cos and non labor ex work group. Con	penses with the	4111609973
2007	1,055	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8110728580
	of MSA mainter s 2005-2007 w					Mtce work group to	6110726360
2007	0	62	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8110819580
	of MSA mainter s 2005-2007 w					Mtce work group to	0110019300
2007	0	0	0	15.6	1-Sided Adj	N/A	TP1MTC2010020 8110946147
	of MSA mainter s 2005-2007 w	•				Mtce work group to	0110940147
2007 Total	1,055	-1,589	0	15.6			
2008	0	-1,705	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 4111843570
2200-209 credits for	<ol><li>The transfer</li></ol>	will combine in the service	damage	labor	nsferred from cos and non labor ex work group. Con	penses with the	
2008 Total	0	-1,705	0	0.0			
2009	0	-1,331	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 4112037070
2200-209 credits for	<ol><li>The transfer</li></ol>	will combine in the service	damage	labor	nsferred from cos and non labor ex work group. Con	penses with the	
2009	125	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050
	ccount. Corres					d to the small tools ittings, & Materials	3085354767

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.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	RefID
2009 Total	125	-1,331	0	0.0			

**Supplemental Workpapers for Workpaper 2GD000.004** 

### Supplemental Workpaper Calculations for incremental costs related to Aging Infrastructure Southern California Gas Company - Gas Distrubtion - Witness Gina Orozco-Mejia

Aging Infrastructure - Obsolete Regulators

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 In 2010, the company identified regulators, excluding those without internal relief capabilities, which because of age, performance or obsolescence 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.

Service Maintenance Workgroups affected:

Methodology:

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

rotal 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

Assumptions:

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

[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

	Ø	[8]	<u>ত</u>	<u>e</u>	[AxBxCxD]=[E]	<u>=</u>					Ŀ	Œ	Œ
			Incidental						-				
# 1000 H		Percent	Work	Overtime									
90 A	Total Orders	Requiring	Duration	Crew Rate	Total per	<u>~</u>					2010	2011	2012
Į.	per Year	Changeout	(Hrs)	(1 or 2 person)	) Year		2010	2011	_	2012	FTE	FE	FTE
1 Risers	5,835	34.0%	0.36	\$ 100.71	\$	7,929		\$ 71	71,929 \$	\$ 71,929		0.7	0.7
2 Stopcock Change	5,910	34.0%	0.36	\$ 48.26	34,907	\$ 206		\$ 34	34,907	l		0.4	0.4
3 Small MSA Rebuild	8,818	34.0%	0.36	\$ 48.26 \$	\$ 52,084	84 \$	1	\$ 52	52,084	\$ 52,084		0.55	0.55
4				Total R	Total Requirement	8	•	\$ 158	920	158,920 \$ 158,920		1.65	1.65

### Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites Southern California Gas Company – Gas Distrubtion – Witness Gina Orozco-Mejia

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

Includes the inital training for employees to learn how to appropriately construct and dismantle the percautionary devices Training Costs:

mps and baricades) pius heduled by local manag∈	mps and bancades) plus the annual review of this procedure. Initial instruction and annual review will be done at the base location and neduled by local management. All impacted field employees will be expected to have recieved this training and review.	
Workgroups affected:	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.	

[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)

[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

receiving annual review.

	[A]	[B]	ටු	$[A \times B \times C]=[D]$	_	<u>(ii)</u>	Ш	Œ	E	Œ	Œ
#	Impacted	Avg.	Training							)	
: Ə۱	Employee	Overtime	Duration								
ָּרוֹיִר 	Count	Pay Rate	(Hrs)	Total per Year		2010	2011	2012	2010 FTE	2010 FTE   2011 FTE   2012 FTE	2012 FTE
1 Initial Instruction	620	\$ 50.77	_ 2	\$ 62,950	es es	31,475	\$ 31,475	- \$	0.5	0.5	0
2 Annual Review	620	\$ 50.77	9.0	15,737	\$	•	\$ 7,869	\$ 7,869	0	0.04	0.04
			Total	Total Requirement	\$	31,475	\$ 39,343	698'4 \$	0.5	0.54	0.04

2 of 2

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites Southern California Gas Company ~ Gas Distrubtion ~ Witness Gina Orozco-Mejia

Set up and Dismantling Costs

Workgroups affected:

> Main Maintenance

> Service Maintenance

> Cathodic Protection

> Measurement & Regulation

Total Orders x Estimated percent of total orders requiring DiRA application x Estimated hours to set-up and dismantle The average hourly rate was Incremental time for platform contruction and dismantling is calculated as follows:

equipment x Overtime Crew Rate (2 person)

Labor Assumptions:

: Methodology:

[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

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

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#		Total	Percent	Work	Overtime							<u>=</u>	Γ
əu	Work Group	Orders	Requiring	Duration	Requiring Duration Crew Rate	Total per			1.2				
 !7		per Year	Set-nb	(FIRS)	(2 person)	Year	2010	2011	2012	2040 ETE 2044 ETE 2042 ETE	2044	2042	Ļ
ď	Main Maintonano	2000	1077							20101	1 1 7 7	77.07	U
,	maill Mailleliailce	2,035	4.41%	3.5	100.71	32.566	\$ 32.566	\$ 32.566	32 556	20		000	c
7	Soning Maintones	1 050	,000	,				2001	4 02,000	0.0	>		?
+	Service Maillellance	7,033	6.80%	3.5	\$ 100.71	\$ 183,430	\$ 183.430	\$ 183,430   \$ 183,430   \$183,430	\$183 430	α,		0	٥
S	Cathodic Protection	3 123	7 90%	2 5	400 17	6			201	?		2	٩
1	10110000	3	0,00.	0.0	♣ 100.7.1	\$ 60,964	\$ 86,364	\$ 86,964   \$	\$ 86,964	0.8	0	œ	00
٦	M&K-Dist. Reg. Station	1,989	46.00%	1.75	\$ 111.66	111 BB   \$ 178 784   \$ 178 784   \$ 178 784   \$ 170 704	\$ 178 78A	£ 478 794	£470 704	,		,	?[`

# Supplemental Workpaper Calculations for incremental costs related to Federal Stimulus Funding Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

# Federal Stimulus Funding

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

Workgroups affected:

> Locate and Mark (Depth Checks)

> Main Maintenance

> Service Maintenance

> Cathodic Protection

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  $\times$  2005-2009 average hours per unit  $\times$  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 <u>orders</u> or miles of Main

Methodology:

# Supplemental Workpaper Calculations for incremental costs related to Rederal Stimulus Funding Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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

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

ш			2010 FTE 2011 FTE 2012 FTE	70	0.5	0.4	00 00
Ü			E 2011 F	-	0.5		0.2
Ξ			2010 FT	o			
		-	2012	\$72.511	\$53.524	\$39,528	\$11.962
			2011	\$72.511	\$53,524	\$39,528	\$11,962
			2010	\$72,511	\$53,524	\$39,528	\$11,962
[AxBxC]=[D]		Overtime Total per	Year	\$72,511	\$53,524	\$39,528	\$11,962
ទ		Overtime	Rate	\$100.71	\$100.71	\$100.71	\$ 48.26
[8]		Hours per	Unit	. 12	31	6	1.28
[A]	Estimated	Annual	Units	. 09	- 21	43	193
			Labor	L&M (Depth Checks)	Main Maintenance	Service Maintenance	Cathodic Protection

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.

Avg Annual							
Avg Annual			2012	\$10.260	\$12.081	\$ 7.399	\$20,762
Avg Annual			2011	\$10,260	\$12,081	\$ 7,399	\$20,762
Avg Annual			2010	\$10,260	\$12,081	\$ 7,399	\$20,762
[A] [B] [B] Avg Annual Estimated Non Labor Annual Cost Per Units Unit 60 \$ 171.00 17 \$ 710.63 43 \$ 172.08 193 \$ 107.58	[A × B]	Total per	Year	\$10,260	\$12,081	\$ 7,399	\$20,762
Estimated Annual Units 60 17 43 193	(Ng Annual		Chit	\$ 171.00	\$ 710.63	\$ 172.08	\$ 107.58
Non Labor L&M (Depth Checks) Main Maintenance Service Maintenance Cathodic Protection	[A] A Estimated	Annual	Units	09	21	43	193
		•	Non Labor	L&M (Depth Checks)	Main Maintenance	Service Maintenance	Cathodic Protection
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# Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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 cas 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.

costs are shown below.	
Workgroups affected:	
	<ul> <li>Main Maintenance</li> <li>Service Maintenance</li> <li>Cathodic Protection</li> <li>Locate and Mark (Depth Checks)</li> <li>Measurement &amp; Regulation (M&amp;R): Limits on construction hours only</li> </ul>
Methodology:	The cost for additional labor and non labor was calculated as follows:
•	<u>Labor</u> Total average orders from 2005-2009 x estimated percent of orders impacted x estimated work duration x overtime crew rates <u>Non-Labor</u> 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

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Supplemental Workpaper Calculations for incremental costs related to Increased City/Municipality Requirements Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

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.)

Labor         Orders         of Jobs         Duration         Crew Rate (Hrs)         (3 person)         Year         2010         201           Main Mtce         2,095         1.50%         1         \$ 145.59         \$ 4,575         \$ 4,575         \$ 4,575         \$ 2010           Service Mtce         4,230         1.50%         1         \$ 145.59         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 6,820         \$ 2,186         \$ 5           L&M (Depth Checks)         994         1.50%         1         \$ 146.59         \$ 2,186	-#		Total	(B) Percent	[C] Work	[D] Overtime	[AxBxCxD]					- 1	-			
Main Mtce	OI	Labor	Orders	of Jobs	Duration	Crew Rate	Total per								2010	2010 2011
Main Mtce         2,095         1.50%         1         \$ 145.59         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 4,575         \$ 5,238         \$ 9,513         \$ 25,645         \$ 25,645         \$ 2		4.2 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4	per Year	Affected	(Hrs)	(3 person)	Үеаг	•	2010			2011		2011 2012	2012	2012
Service Mitce         4,230         1.50%         1         \$ 145.59         \$ 9,238         \$ 9,238           CP Field         3,123         1.50%         1         \$ 145.59         \$ 6,820         \$ 6,820           L&M (Depth Checks)         994         1.50%         1         \$ 146.59         \$ 2,186         \$ 2,186           L&M (Depth Checks)         994         1.50%         1         Total per Percent         Material Material         Affected         Affected         Affected         Costs per Pear Pear Pear Pear Affected         Total per Pear Pear Pear Pear Pear Pear Pear Pe	=	Main Mtce	2,095	1.50%	. 1			₩.	4,575	s		4,575	4,575 \$	4,575 \$ 4,575	\$ 4,575	\$ 4,575 0.05
CP Field   3,123   1.50%   1   \$ 145.59   \$ 6,820   \$ 6,820   \$ 5	7	Service Mtce	4,230	1.50%	2.1			s	9,238	s	ı	9,238	9,238 \$	-	s	\$ 9.238
L&M (Depth Checks)   994   1.50%   . 1   \$ 146.59   \$ 2,186   \$ 2,186   \$ 5	₩,	CP Field	3,123	1.50%	.1			<del>ss</del>	6,820	s		6,820	6,820 \$		ψ,	\$ 6.820 0.06
Force	_	L&M (Depth Checks)	994	1.50%	: 1		l	s	2,186	s	l	2,186	2,186 \$		\$ 2,186	\$ 2,186 0.02
Total         Percent         Material         Total per         2010         2011         21           Der Year         Affected         Order         Year         2,095         1.50%         \$ 1,720         \$ 54,051         \$ 54,05			Œ	<u> </u>	<u>ত</u>	[AxBxC]										
Non-Labor         Orders         of Jobs         Costs per Pear         Total per Pear         2010         2011         20           Main Mtce         2,095         1.50%         \$ 1,720         \$ 54,051 <th></th> <th></th> <th>Total</th> <th>Percent</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>l</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>			Total	Percent						l						
Main Mtce         2,095         1.50%         \$ 1,720         \$ 54,051         \$		Non-Labor	Orders	of Jobs	Costs per	•										
Main Mtce         2,095         1.50%         \$ 1,720         \$ 54,051         \$ 54,051         \$ 54,051         \$ 54,051         \$ 54,051         \$ 54,051         \$ 54,051         \$ 54,051         \$ 54,051         \$ 1,09,134<	_		per Year	Affected		Year	2010		2011		20	12	12			
Service Mtce         4,230         1.50%         \$ 1,720         \$ 109,134         \$ 109		Main Mtce	2,095	1.50%	\$ 1,720		\$ 54,051	es.	54,051	s	'	54.051	54.051	54.051	54.051	54.051
3,123 1.50% \$ 1,720 \$ 80,573 <b>\$ 80,573 \$ 80,573 \$</b> 80,573 <b>\$</b> 80,573 <b>\$</b> 80,573 <b>\$</b> 80,573 <b>\$</b>		Service Mtce	4,230	1.50%	_		\$ 109,134	S	109,134	G	F	109.134	09,134	09,134	09.134	09.134
994 1.50% \$ 1,720 \$ 25,645 \$ 25,645 \$ 25,645 \$		CP Field	3,123	1.50%				<del>S</del>	80,573	(A)	"	80,573	30,573	30,573	30,573	30,573
		L&M (Depth Checks)	994	1.50%		क		<del>G</del>	25,645	S	``	25.645	5.645	5.645	5.645	5.645

Eng	ingineered Traffic Control Pla	Plan												
		M	[8]	<u>ত</u>	0	[AxBxCxD]						Ē	Œ	Ē
#		Total	Percent	Work										
Ðυ	Labor	Orders	of Jobs	Duration	Overtime	Total per						2010	2011	2012
!!T		per Year	Affected	(Hrs)	FPA Rate	Year		2010	2011		2012		1	FTF
<del></del>	Main Mtce	2,128	7.00%	-	\$ 59.94	\$ 8,929	S	8.929	s	8.929	\$ 8.929	60 0	0	0
5	Service Mtce	4,230	7.00%	-	\$ 59.94	\$ 17.748	us.	17,748	G.	17 748	·	0 17	0 17	0 17
Ξ,	CP Field	3,123	7.00%	_	\$ 59.94	\$ 13,103	မှာ	13,103	69	13,103	\$ 13.103	0 77	•	7
7	L&M (Depth Checks)	994	7.00%	_	\$ 59.94	ιs	65	4,171	S	4.171	\$ 4.171	0.04		2
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ality Requirements

Southern Cannollia Gas Company Gas Distribuon Withess Gina Orozco-Mi	mental Workpaper Calculations for incremental costs related to Increased City/Municipa
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Engineered Traffic Control Plan (cont'd)

									Ш		2010	벁	0.1	0.1	0.1	0.03	0.4	0.8	0.4									
												2012	\$ 6,330	\$ 14,300	\$ 9,436	\$ 3,003	\$ 41,998	\$ 77,401	\$ 42,822									
			2012	37.240	74.025	54,653	17,395					2011	6,330	14,300	9,436	3,003	41,998	77,401	42,822					2012	34,568	78,095	51,530	16,401
	L			s	₩,	S	s			L			s	s	s	υp	s	မာ	s			L			s	s	43	8
			2011	37,240	74,025	54,653	17,395	:				2010	6,330	14,300	9,436	3,003	41,998	77,401	42,822					2011	34,568	78,095	51,530	16,401
	L			s	s	ક્ક	s			L			s	s	s	s	\$	s	s						\$	s	S	↔
			2010	\$ 37,240	\$ 74,025	\$ 54,653	\$ 17,395		[AxBxCxD]		Total per	Year	\$ 6,330	\$ 14,300	\$ 9,436	\$ 3,003	\$ 41,998	\$ 77,401	\$ 42,822					2010	\$ 34,568	\$ 78,095	\$ 51,530	\$ 16,401
[AxBxC]		Total per	Year	\$ 37,240	\$ 74,025	\$ 54,653	\$ 17,395		<u>e</u>	Overtime	Crew Rate	(2 person)	\$ 100.71	\$ 100.71	\$ 100.71		\$ 48.26	\$ 111.66	\$ 111.66		[AxBxC]		Total per	Year	\$ 34,568	78,095	51,530	16,401
ច្ច	Material	Costs per	Order	\$ 250	\$ 250 \$	\$ 250 8	\$ 250 \$		<u>ত</u>	Work	Duration	(Hrs)	1	1   8	1   8		0.25	0.25	0.5		<u>ত</u>	Material	Costs per	Order	\$ 220	\$ 220 \$	550	\$ 220 \$
<u>@</u>		Percent	required	%00.2	7.00%	7.00%	7.00%		[8]	Percent	of Jobs	Affected	3.00%	3.00%	3.00%	3.00%	17%	16%	20.00%	ı	<u>6</u>		Percent	-	3.00%	3.00%	3.00%	3.00%
[A]	Total	Orders	per Year	2,128	4,230	3,123	994	SI	[A]	Total	Orders	per Year	2,095	4,733	3,123	994	21,095	17,393	1,534	person	Ā	Total	Orders	per Year	2,095	4,733	3,123	994
	-	Non-Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)	Limits on Construction Hours			Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)	M&R - Med MSA	M&R - Lrg MSA	M&R-Distr Reg Sta	Note: M&R Med MSA is single person			Non-Labor		Main Mtce	Service Mtce	CP Field	L&M (Depth Checks)
ı	#	: Əl	! !	쯘	4	<u></u>	<u>6</u>	Limit		#	əu	<u></u> !7	<u>-</u>	<u>∞</u>	<u>현</u>	8	7	2	2	_		#	e ət	<u></u>	<del>2</del> 7	25	9	27L

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

Note: The assumptions for Increased Permit Fees and Construction Requirements and for Increased Paving Requirements are Supplemental Workpaper Galculations for incremental costs related to Increased City/Municipality Requirements

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

Di   E   [AxBxC]   [AxBx		[AYRYE]	-				2012	é	_	12,250   \$148.330	Ļ.	139   \$228,791	107 101
A		[AxBxD]				7700	1107	455	200	\$ 112,	412	ر در	
A   B   C   C   C   C   C   C   C   C   C	;	[AxBxC]				2040	2010	108 533	20100	4/1/4	120 570		29 270
Total IBI ICI 2010  Total Percent Costs/ Per Year required Order 2,811 99.00% \$ 39.00 5,417 37.00% \$ 39.00 3,123 99.00% \$ 39.00 994 99.00% \$ 39.00	į	II.	2012	Incr. N	Costs/	Order	2010	\$ 74.00	1,000	4.00	2 74 00 6	200:1	00 PZ
Total Bi Orders Percent per Year required 2,811 99.00% 5,417 37.00% 3,123 99.00% 994 99.00%	į	[0]		2011	Incr. NL	Costs/ Order		ι	e	00.00	\$ 56.00	25	- CC 675
Total (BI) Orders Percer per Year require 5,417 37.009 994 99.009	ξ	2	2010	Incr. NL	Costs/	Order		\$ 39.00		•	\$ 39.00		23000
[A] Total Orders per Year 2,811 5,417 3,123	1 _	Ξ			Percent	required	200	88.00%	37 00%	200	%00.66	2000	820.88
Non-Labor Main Mtce Service Mtce CP Field L&M (Depth Checks)	[Ā]			Total	Orders	per Year		2,811	5.417		3,123	700	420
				Non-labor			Main Mtoo	Walli Wile	Service Mtce	i	CP Field	1 & M (Donth Chooles)	Committee (Secretary)

	[A < B < E]	[work]			700	71.07	04 ¢20E 042	1	26   \$224,500	22 6270 024	-	100 22 0 10
	[AxBxD]				2011	7011	192 894		4 146,326	487 282	24,0	A 26 264
	[AxBxC]				2010	202	92.482	70 450	001,07	87 444		17.395
	Ш	2012	Incr. NL	Costs/	Order		\$ 112.00	41200	4 112.00	\$ 112.00		5 112.00
	0		2011	Incr. NL	Costs/ Order		\$ 73.00	23.00	20.0	\$ 73.00	12 00	00.5
	[0]	2010	Incr. NL	Costs/	Order	00 10	35.00	\$ 35.00	1	35.00	00 40	00.00
	<u>(B</u>			Percent	required	/000	34.00%	37.00%	1000	80.00%	50 00%	50.00
3	₹		Total	Orders	per Year	2 044	4,011	5,417	2 100	3,123	700	-
ייים בפספ י מנווים ויפלחון בווופוווים			Non-Labor			Main Mtco		Service Mtce	CP Field	niai i io	L&M (Depth Checks)	(

# Supplemental Workpaper Calculations for incremental costs related to Los Osos City Sewer System Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Los Osos City Sewer System

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

This

Workgroups affected:

> Locate and Mark

Depth Checks

> Locating and Marking

> Job Observations

> Main Maintenance

> Service Maintenance

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

Labor

follows:

Methodology

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

Non-Labor

Labor Assumptions:

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

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 [A]: Estimated number of units were derived by field assessment of the impact that the proposed proposed sewer line location will need to be altered. Additionally continuous observation will be

equired 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

Supplemental Workpaper Galculations for incremental costs related to Los Osos City Sewer System Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

-	[A]	[8]	<u></u>	[A×B×C]=[D]				Ξ	Ш	Ш
Labor	Estimated Total Units	Hours per Order	Overtime Rate	Total Project Cost	2010	<b>2011</b> (20%)	<b>2012</b> (70%)	2010 FTE	2010 FTE 2011 FTE 2012 FTE	2012 FTE
L&M (Depth Checks)	86	12	\$ 100.71	\$ 120,156	<del>ا</del>	\$ 24,031	\$ 84,109	ö	0.2	0.8
Locating and Marking	5,763	0.21	\$ 48.26	\$ 59,304	- \$	\$ 11,861	\$ 41,513	0	0.1	0.4
Job Observations	319	4.00	\$ 48.26	\$ 61,573	<del>.</del> .	\$ 12,315	\$ 43,101	0	0.1	0.4
Main Alterations	75	32	\$ 100.71	\$ 241,704	<del>G</del>	\$ 48,341	\$169,193	0	. 0.5	1.6
Service Alterations	513	9	\$ 100.71	8 307,509	\$	\$ 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

	2012 (70%)	\$ 11,731	\$	S	\$353,967	\$ 36,914
	2011	\$ 3,352	5	5	\$101,133	\$ 10,547
	2010	- \$	-	-	٠ <del>نه</del>	· \$
[A×B]	Total per Year	16,758	1	1	505,667	52,734
[8]	Avg Annual Non Labor Cost Per Unit	171.00 \$	٠	٠	6,742 \$	103 \$
[A]	Estimated Control	\$ 86	\$ 0	\$ 0	\$ 92	513 \$
	Non Labor	L&M (Depth Checks)	Locate and Mark	Job Observations	Main Alterations	Service Alterations
L	# əuiJ	9	7	8	6	힏

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:**

Years Labor Non-Labor NSE Total FTE

			In 20	09\$ (000)			
	Adju	sted-Record	ded		Ad	justed-Fore	cast
2005	2006	2007	2008	2009	2010	2011	2012
12,878	13,136	12,967	12,462	12,513	15,020	13,627	16,066
2,425	2,613	2,306	2,055	1,898	2,202	2,381	2,543
0	0	0	0	0	0	0	0
15,303	15,749	15,273	14,517	14,411	17,222	16,008	18,609
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	t Method	Bas	se Foreca	st	Foreca	ast Adjust	ments	Adjus	ted-Forec	ast
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	2012	<u>2010</u>	<u>2011</u>	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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	Adj_Type
2010	0	304	0	304	0.0	1-Sided Adj
	ll funding require g rolled out as a		•		oile Data T	erminals
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 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 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. 0 2011 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 1,597 15.3 2012 0 290 290 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.

3,221

0.0 1-Sided Adj

2012

3,221

Area: GAS DISTRIBUTION Witness: Orozco, Guillermina Category: A. Field Operations & Maintenance Category-Sub: 7. Field Support Workpaper: 2GD000.000 - Pipeline Operations & Maintenance -- Field Support FTE Adj Type Year/Expl. Labor **NLbr** NSE Total 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 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 0 332 0.0 1-Sided Adj C: Incremental labor dollars representing the five year average forecast. 2012 355 355 0.0 1-Sided Adj C: Incremental non labor dollars representing the five year average forecast. 2012 1-Sided Adj 10.0 Incremental FTEs representing the five year average forecast.

2012 Total

3,553

40.7

4,198

Area: GAS DISTRIBUTION Witness: Orozco, Guillermina

Category: A. Field Operations & Maintenance

Category-Sub: 7. Field Support

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 (Nor	minal \$)				
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 (Nomina	al \$)				
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 (Cor	nstant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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 Nor	ninal \$ (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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type	From CCtr	RefID
2005	88	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009091 1101803740
current cha		is 100% non	shared S	CG. C		ignment with ljustment decrease	1101000740
2005	0	0	0	1.3	1-Sided Adj	N/A	TP1MTC2009091
current cha		is 100% non	shared S	CG. C	orresponding ad	in alignment with ljustment decrease	1101838960
2005	-1,187	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020
	f MSA mainte 5-2007 with cu	•			• .	GD000.004 to align	8104449090
2005	0	0	0	-18.6	1-Sided Adj	N/A	TP1MTC2010020
	f MSA mainte 5-2007 with cu	•			• .	GD000.004 to align	8104601993
2005 Total	-1,099	0	0	-17.3			
2006	-1,341	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020 8105435677
	f MSA mainte 5-2007 with cu	•			• .	GD000.004 to align	0103433077
2006	0	-86	0	0.0	1-Sided Adj	N/A	TP1MTC2010020
	f MSA mainte 5-2007 with cเ	•			• .	GD000.004 to align	8105535583

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	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	RefID
2006	0	0	0	-20.8	1-Sided Adj	N/A	TP1MTC2010020
	of MSA mainter 5-2007 with cu					GD000.004 to align	8105640460
2006 Total	-1,341	-86	0	-20.8			
2007	72	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009091
charging,		non shared	SCG. Co	orrespoi		gnment with current t decrease in USS	1102029400
2007	0	10	0	0.0	1-Sided Adj	N/A	TP1MTC2009091
charging,		non shared	SCG. Co	orrespoi		gnment with current t decrease in USS	1102132950
2007	0	0	0	0.8	1-Sided Adj	N/A	TP1MTC2009091 1102215683
current ch		is 100% non	shared S	SCG. Co	orresponding ad	n alignment with justment decrease	1102215003
2007	-1,055	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010020
	of MSA mainter 5-2007 with cu	-				GD000.004 to align	8110316263
2007	0	-62	0	0.0	1-Sided Adj	N/A	TP1MTC2010020
	of MSA mainter 5-2007 with cu					GD000.004 to align	8110408170
2007	0	0	0	-16.1	1-Sided Adj	N/A	TP1MTC2010020
	of MSA mainter 5-2007 with cu					GD000.004 to align	8110531487
2007 Total	-983	-53	0	-15.3			
2008	-19	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009082
•	•			•		oe in Mains work own in said work	

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.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	RefID
2008	78	0	0	0.0	1-Sided Adj	N/A	TP1MTC2009091
charging, v		non shared S	SCG. Co	rrespon		nment with current t decrease in USS	1102322453
2008	0	15	0	0.0	1-Sided Adj	N/A	TP1MTC2009091
charging, v	•	non shared s	SCG. Co	rrespon		nment with current t decrease in USS	1102441343
2008	0	0	0	0.8	1-Sided Adj	N/A	TP1MTC2009091
current cha		s 100% non s	shared So	CG. Co	rresponding adj	n alignment with ustment decrease	1102605923
2008 Total	59	15	0	8.0			
2009	23	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010040 9122907223
charging, v		non shared S	SCG. Co	rrespon		nment with current t decrease in USS	3122301223
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010040
charging, v		non shared \$	SCG. Co	rrespon		nment with current t decrease in USS	9122931723
2009	74	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050
	count. Corres					d to the small tools ttings, & Materials	3084923907
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050
	count. Corres					d to the small tools ttings, & Materials	3111423077
2009	0	0	0	0.0	1-Sided Adj	N/A	TP1MTC2010050
	count. Corres					d to the small tools ttings, & Materials	3112143647

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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	FTE A	dj Type	From CCtr	RefID
2009	0	0	0	0.0 1-Side	d 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** 

# Supplemental Workpaper Calculations for incremental costs related to Wireless Fees for Mobile Data Terminals (MDT) Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

has to offer, the computer must be in constant communication with the host scheduling system. This will be accomplished through existing wireless networks within 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 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 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, 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 dentification of available resources near a given location. The calculation of the incremental costs for wireless fees are shown below. Wireless Fees for Mobile Data Terminals (MDT)

Field Support Norkgroups affected:

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

Non-Labor

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

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

2011 cost per month - at assumed reduced rate (\$35) - multiplied by 12 months <u>Ö</u>

2012 cost per month - at assumed reduced rate (\$33.25) - multiplied by 12 months.

		Ø	[8]	[5]	[0]	[AxB]		[AxC]	[AXD]	ᆷ
			2010	2011	2012		_			
			Estimated	Estimated	Estimated					
		Vehicles with	Annual Cost	Annual Cost	Annual Cost					
		MDTs	per Unit	per Unit	per Unit	2010		2011	2012	12
- 1	Field Employees	995	\$ 376	\$ 420	\$ 399	\$ 212,816	16 \$	237,720	\$ 22	25,834
- 1	Supervisors	161	\$ 564	\$ 420	66E \$	\$ 90,804	\$	67,620	9	34,239
				Total Requirement	uirement	\$ 303,620	\$ 02	305,340	\$ 29	290,073

Assumptions:

# 1 of 1

Supplemental Workpaper Calculations for incremental costs related to the Area Resource Scheduling Organization Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

Area Resource Scheduling Organization

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 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 these incremental costs are shown below.

Workgroups affected:

> Field Support

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

Incremental O&M scheduling advisors x Estimated salary Labor

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.

[A] [B] [AxB]	Scheduling Total per	Advisors Salary Year	6.0   \$ 85,000   \$ 510,000	5.4 \$ 85,000 \$ 459,000	5.4 \$ 85.000 \$ 459.000
			2010	2011	2012
	# əı	الأرا ا	ᆛ	7	ო

# 1 of 1

Supplemental Workpaper Calculations for incremental costs related to Miscellaneous Increased Support Requirements Southern California Gas Company – Gas Distrubtion – Witness Gina Orozco-Mejia

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. Miscellaneous Increased Support Requirements

During the execution of many work elements, dispatch operations remains the hub between the field personnel, technical experts, contractor

Workgroups affected:

> Field Support

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

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.

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

[8] 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 Stimutus 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

[A] [B]	-	<b>(2)</b>	r	[AxB]=[C]	0	回	ŀ	[CxDxE]=[F]				<u></u>	<u></u>	<u></u>
			lotal .			Cverime								
	%	_	Impacte	0	Dispatcher   Dispatcher	Dispatche	r   Total per	i per				2010	2011	2012
Supplemental Work Paper Orders Impacted Orders	Impacted		Order	s	Time	Rate	× —	Year	2010	2011	2012	FIE	FTE	H
City/Muni. Req Limits on Constr. Hours														
>>Impact: Main Maintenance 2,095 3% 63	3%		8	_	0.25	\$ 48.26	8 9	758	\$ 758	\$ 758	\$ 758			
>>Impact: Service Maintenance 4,733 3% 142	3%		14	2	0.25	\$ 48.26	69	1,713	\$ 1.713	\$ 1.713	\$ 1.713			
>>Impact: Cathodic Protection 3,123 3% 94	3%	_	8		0.25	\$ 48.26	ક્ર	1,130	\$ 1.130	\$ 1.130	\$ 1.130			
>>Impact: L&M (Depth Checks) 994 3% 30	3%		8		0.25	\$ 48.26	es	360	\$ 360	\$ 360	\$ 360			
Sub-Total: Limits on Constr. Hours 10,945 328		328	328	_		•		İ	\$ 3,961	\$ 3.961	\$ 3.961			
Federal Stimulus Work								İ						
>>Impact: Main Maintenance 17 100% 17	17 100% 17	100% 17	17		0.25	\$ 48.26	8	205 \$	\$ 205	\$ 205	\$ 205			
>>Impact: Service Maintenance 43 100% 43	100%		43	_	0.25	\$ 48.26	မှ	519	\$ 519	\$ 519	\$ 519			
>>Impact: Cathodic Protection 193 100% 193	100%	Ì	193	_	0.25	\$ 48.26	es	2,328	\$ 2,328	\$ 2,328	\$ 2,328			
>>Impact: L&M (Depth Checks) 60 100% 60	100%		09		0.25	\$ 48.26	8	724	\$ 724	\$ 724	\$ 724			
Sub-Total: Federal Stimulus Work 313 313		31	31	2					\$ 3,776	\$ 3,776	\$ 3,776			
1 USA Paint Markings Removal 13,866 15% 2,080	15%	Н	2,08	e	0.15	0.15 \$ 48.26 \$ 15,055   \$15,055   \$15,055   \$15,055	6 \$ 15	5,055	\$15,055	\$15,055	\$15,055			
						Total Re	adnirem	ent	\$ 22,792	Total Requirement   \$22,792   \$22,792   \$22,792	\$ 22,792	0.3	0.3	0.3
													l	

# 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)

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. Ihrough the OpEx 20/20 Program new technology is being developed and deployed to enhance SCG's field and office work processes related to Maintenance 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 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,

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.

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

Workgroups affected:

Methodology:

Pipeline O&M Field Support

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]: =  $[B] \times [D] \times [E$  for any given year]  $\times 8$  hours/day

[G]: FTEs calculated by dividing the incremental labor dollars by the hourly rate dividied by full time

equivalent hours = [F/D/2080]

Southern California Gas Company Test Year 2012 GRC - APP Non-Shared Service Workpapers

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

				_											
<u></u>	2012 FTE		5.7	200	5 5	2 0	7.5	41/	-	40	0	200	1,5	0.3	25.0
គ្ន	2011 FTE		7	- 2	0	1 2	2 0	200	200	-	0		0	0.7	0.4
<u></u>	2010 FTE	· · · · · · · · · · · · · · · · · · ·	57	3 0	200	. "	2 0	47	0	0.5	0.0	0	12	0.3	18.8
г			_	_	_	_	_	_	_	_	_	_		T	
Ξ	· Training Costs	2012	529 584	54 046	93,350	362 878	891 907	542,668	6.700	47,952	24.565	17.952	125.064	34,744	\$2,731,409
-		· · · · · ·	G	╫	╀╌	╀	╀	┿	╁	⊢	╀	⊢	╀┈	8	Н
E	steoO gninistT	1102	105 917	10,809	18,670	72,576	59 460	108,534	1,340	9.590	4.913	3,590	25,013	6,949	427,361
_	<u> </u>		65	65	8	63	69	69	67	67	69	(c)	ક્ત	κ	49
E	stsoO gninistT	2010	529 584	64.855	112,020	362.878	59.460	542,668	8,040	57,542	24,565	21,542	125,064	34,744	1,942,962
			es	67	63	ક્ક	சு	မှ	69	မှာ	မာ	မာ	မှာ	ઝ	\$ 1
Ξ	eysQ gninis1T S	201	5.00	5.00	5.00	5.00	15.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
	aysQ gninisıT_f	201	1.00	1.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	2010 Erining Days				00.9	5.00	1.00	5.00	6.00	6.00	5.00	6.00	5.00	2.00	
	·	OT Rate	\$ 44.88	8 48.26	8 44.88	8 48.26	\$ 59.94	55.83	55.83	59.94	\$ 55.83	- 1	- 1	3 48.26	
	•	ļ	⊢	7	2	7		2	$\dashv$	ဖွ	$\dashv$	2		4	
<u>당</u> .		Wage Rate	\$ 29.92	\$ 32.17		\$ 32.17	\$ 39.96	li	٠ ا	١	- 1		1	\$ 32.1	•
<u>@</u>		Emp Count	295	28	52	188	124	243	က	2	=	9	8	18	1052
[A]		Classifications  Needing Training	Constrn Tech	2 Disp Spec	3 District Ops Clerk-4	4 Engy I ech - Dist	5 Fld Ping Assoc	6 Ld Constrn Tech	Ld Disp Spec	Ld Mtr & Reg Tech	9 Meas Spec	U Mtr & Regulator Clerk - 4	1 Mtr & Regulator Tech #1	MET	3 All Bases Totaled

# Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites Southern California Gas Company – Gas Distrubtion – Witness Gina Orozco-Mejia

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

Includes the inital training for employees to learn how to appropriately construct and dismantle the percautionary devices Training Costs: (ramps schedu

otions:	[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)	

[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

receiving annual review.

	[ <u>A</u> ]	[B]	ටු	$[A \times B \times C]=[D]$	Θ		<u> </u>	Ш	Œ	Œ	Œ
# 91	Impacted Employee	Avg. Overtime	Training Duration								
uil	Count	Pay Rate	(Hrs)	Total per Year	2010	_	2011	2012	2010 FTE	2010 FTE 2011 FTE 20	2012 FTE
1 Initial Instruction	620	\$ 50.77	2	\$ 62,950	\$ 31	31,475	\$ 31,475	- \$	0.5	0.5	0
2 Annual Review	620	\$ 50.77	0.5	15,737	\$	-	5 7,869	\$ 7,869	0	0.04	0.04
			Tofa	Total Requirement	\$ 31	31 475	29 343	584	40	0.54	70.0

Supplemental Workpaper Calculations for incremental costs related to Pedestrian Access at Construction Sites Southern California Gas Company ~ Gas Distrubtion ~ Witness Gina Orozco-Mejia

Set up and Dismantling Costs

Workgroups affected:

> Main Maintenance

> Service Maintenance

> Cathodic Protection

> Measurement & Regulation

Total Orders x Estimated percent of total orders requiring DiRA application x Estimated hours to set-up and dismantle The average hourly rate was Incremental time for platform contruction and dismantling is calculated as follows:

equipment x Overtime Crew Rate (2 person)

Labor Assumptions:

: Methodology:

[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

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

	Æ	[8]	[0]	<u>e</u>	[AxBxCxD]=[E]				Œ	Œ	<u> </u>
#	Total	Percent	Work	Overtime							
Mork Group	Orders	Requiring Duration	Duration	_	Total per						
!7	per Year	Set-nb	(Hrs)	(2 person)	Year	2010	2011	2042	2040 ETE 2044 ETE 2040 ETE	77.7	0,00
Alloin Maintenance	1000					2:02			2010 712		217 7 LOV
S Main Maintenance	2,035	4.41%	35	\$ 100.71	32 566	S 32 566	32 55 5	22 66 2	S	5	3
A Committee Manimater	100				20012	ŀ	000,20	1	2.0	?	?
+ Service Maintenance	7,653	6.80%	3.5	\$ 100.71	\$ 183 430	\$ 183.430   9	183 430	027 2813	,	,	,
5 Cathodia Deservice	2,00	1000			20112	00.00.0	100,100	4100,400	0	o.	<u>.</u>
סמווספוני בוחופרווסנו	5, 5	%08.	3	\$ 100.71	\$ 86.964	\$ 86 964	S 86 964	C 26 06.4	0	C	
S Man Dick Don Ctation	000	,,,,,			20100	0000	+00,00	+00,000	0.5	o S	<u>.</u>
of Man-Dist. Reg. Station	. 383	46.00%	1.75	\$ 111.66	111.66   \$ 178 784   \$ 178 784   \$ 178 784   \$ 479	\$ 178 784	2 178 784	£479 794	7	,	,

2 of 2

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:**

Years
Labor
Non-Labor
NSE
Total
FTE

			In 20	09\$ (000)			
	Adju	sted-Record	led		Adj	usted-Fore	cast
2005	2006	2007	2008	2009	2010	2011	2012
1	0	1	0	0	0	0	0
10,912	11,291	10,501	9,368	8,620	8,653	9,399	10,145
0	0	0	0	0	0	0	0
10,913	11,291	10,502	9,368	8,620	8,653	9,399	10,145
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	t Method	Bas	e Forecas	st	Foreca	ast Adjust	ments	Adjust	ted-Forec	ast
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	2012	<u>2010</u>	<u>2011</u>	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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 no 2010 and the 201		•	•		a mid-wa	y point between	
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 r 5 year average.	ion labor d	ollars represer	iting the for	ecast for TY20	012 which	is based on the	
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:**

ctermination of Aujuste	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 (Nor	minal \$)				
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 (Nomina	al \$)				
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 (Cor	nstant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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:**

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	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
Adjustmer	nt necessary to	reflect cha	raina of pre	charge	fittings as 100	% O&M. Capital	3080002157
					s per usual GR		
2007 Total	0	1,433	0	0.0			
2008	0	3.049	0	0.0	1-Sided Adi	N/A	TP1MTC2010050
2000	O	3,049	Ü	0.0	r Olded Maj	14// \	
							3080239373
•	-			_	fittings as 100 s per usual GR	% O&M. Capital	3080239373
•	-			_	-	•	3080239373
reassignm	nents will then b	oe handled	in the RO r	model a	-	•	3080239373
reassignm	nents will then b	oe handled	in the RO r	nodel a	-	•	3080239373 TP1MTC2010050

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. RefID <u>Labor</u> **NLbr** <u>NSE</u> <u>FTE</u> Adj Type From CCtr 0 2009 -996 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** 

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

Assumptions:

[B]: Incremental cost per SCG Safety Department (new cost per vest---\$27.50,

minus current cost per vest---\$15.23)

# Supplemental Workpaper Calculations for incremental costs related to new Safety Requirement Southern California Gas Company -- Gas Distrubtion -- Witness Gina Orozco-Mejia

es ns,

Non- <u>Labor</u> Number of safety vests purchased annually x the incremental cost per vest.	
The cost for additional non labor was calculated as follows:	Methodology:
Tools, Fittings, Materials	Workgroups affected:
high visibility garments be made to different specifications. This new standard, adopted by Cal/OSHA, DOT and CalTran 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.	high visibility garments be made to crequires more square inches of bacl calculation of the incremental costs
There is a new Cal/OSHA requirement for safety traffic vests as result of a revised ANSI (107-2004) standard that require	I nere is a new Cal/OSHA requireme

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

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

Workpaper: VARIOUS

Summary for Category: B. Asset Management

	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
papers belonging to				
Labor	6,174	6,174	6,482	6,520
Non-Labor	603	603	603	603
NSE	0	0	0	0
T-4-1	0.777	0.777		7 400

In 2009\$ (000)

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:

Years
Labor
Non-Labor
NSE
Total
FTE

	In 2009\$ (000)										
	Adjus	sted-Record	Adjusted-Forecast								
2005	2006	2007	2008	2009	2010	2011	2012				
5,376	5,541	5,882	5,912	6,174	6,174	6,482	6,520				
933	813	1,118	656	603	603	603	603				
0	0	0	0	0	0	0	0				
6,309	6,354	7,000	6,568	6,777	6,777	7,085	7,123				
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			
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
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		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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	FTE	Adj_Type
2010 Total	0	0	0	0	0.0	
2011	38	0	0	38	0.0	1-Sided Adj
of Green Ho	FTE required to use Gas Emissi er in 2012. FTE	on requiremer	nts. Additio	nal FTE will b	e added pa	art in 2011 and
2011	0	0	0	0	0.5	1-Sided Adj
	FTE required to use Gas Emissi er in 2012.		•	•		
2011	270	0	0	270	0.0	1-Sided Adj
	t of compliance					oper review and 590,000 each (3
2011	0	0	0	0	3.0	1-Sided Adj
	addition of three t of compliance			ntal group to h	elp with pr	oper review and
2011 Total	308	0	0	308	3.5	

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 1-Sided Adj 0.0 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) 0 2012 0 0 0 1-Sided Adj 3.0 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 76 0.0 1-Sided Adj Incremental 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 1.0 1-Sided Adj Incremental 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.

346

4.0

Area:

2012 Total

346

GAS DISTRIBUTION

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:**

termination of Aujustea	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 (Nom	inal \$)				
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 (Cons	stant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type	From CCtr	RefID
2005	48	0	0	0.0	CCTR Transf	From 2200-0603.000	TPKSV20091027 124305903
Coast TSM		Pac Coast E	Invironme	ntal.	oositions from 220 The transfer will b up.		124505905
2005	0	0	0	0.5	CCTR Transf	From 2200-0603.000	TPKSV20091027 124506577
Coast TSM		Pac Coast E	Invironme	ntal.	positions from 220 The transfer will b up.		124500577
2005	27	0	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028
to 2200-04	-	ngineer. The	transfer	will bri	positions from 220 ing together consi rk group.		140322847
2005	0	0	0	0.4	CCTR Transf	From 2200-0480.000	TPKSV20091028 141202763
to 2200-04	•	ngineer. The	transfer	will bri	positions from 220 ing together consi rk group.		141202703
2005 Total	75	0	0	0.9			
2006	110	0	0	0.0	CCTR Transf	From 2200-0603.000	TPKSV20091027

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.

TPKSV20091027 124657970

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.	<u>Labor</u>	<u>NLbr</u>	NSE	<u>FTE</u>	Adj Type	From CCtr	RefID
2006	0	0	0	1.5 C	CTR Transf	From 2200-0603.000	TPKSV20091027
Coast TSI	of ST Managem M to 2200-0537 charging for a	7 Pac Coast E	Environme	ental. Th	e transfer will		124747423
2006	0	10	0	0.0 C	CTR Transf	From 2200-0603.000	TPKSV20091028
-	ermits costs (0 om 2200-0603			oond with	the transfer o	f Evnironmental	133751490
2006	23	0	0	0.0 C	CTR Transf	From 2200-0433.000	TPKSV20091028
to 2200-04		gineer. The	transfer v	vill bring t	ogether consis	00-0433 SI TSM stent placement of	134520733
2006	0	0	0	0.3 C	CTR Transf	From 2200-0433.000	TPKSV20091028 135513853
to 2200-04		gineer. The	transfer v	vill bring t	ogether consis	200-0433 SI TSM stent placement of	130313003
2006	0	20	0	0.0 C	CTR Transf	From 2200-0433.000	TPKSV20091028
-	ermits costs (0 om 2200-0433	•		oond with	the transfer o	f Environmental	140013907
2006	53	0	0	0.0 C	CTR Transf	From 2200-0480.000	TPKSV20091028
to 2200-04		ingineer. The	transfer	will bring	together cons	00-0480 NO TSM sistent placement	140423207
2006	0	0	0	0.8 C	CTR Transf	From 2200-0480.000	TPKSV20091028
to 2200-04		ingineer. The	transfer	will bring	together cons	200-0480 NO TSM sistent placement	141120700
2006	0	24	0	0.0 C	CTR Transf	From 2200-0480.000	TPKSV20091028
	ermits costs (C ental Labor. Fro				orrespond with	the transfer of	141318983
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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	FTE	Adj Type	From CCtr	RefID
2007	25	0	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028 134722843
to 2200-0	-	gineer. The	transfer w	ill bring	g together consis	00-0433 SI TSM stent placement of	101722010
2007	0	0	0	0.3	CCTR Transf	From 2200-0433.000	TPKSV20091028
to 2200-0	•	gineer. The	transfer w	ill bring	g together consis	200-0433 SI TSM stent placement of	135423570
2007	0	31	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028 140100610
	permits costs (Com 2200-0433 t			ond wi	ith the transfer o	f Environmental	140100010
2007	95	0	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 140520177
to 2200-0		ngineer. The	e transfer	will brir	ng together cons	00-0480 NO TSM sistent placement	140320177
2007	0	0	0	1.4	CCTR Transf	From 2200-0480.000	TPKSV20091028 141031810
to 2200-0		ingineer. The	e transfer v	will brir	ng together cons	200-0480 NO TSM sistent placement	141001010
2007	0	39	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028
	permits costs (C ental Labor. Fro			•	correspond with	the transfer of	141415593
2007 Total	120	70	0	1.7			
2008	62	0	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028
to 2200-0	-	gineer. The	transfer w	ill bring	g together consis	00-0433 SI TSM stent placement of	134830860
2008	0	0	0	8.0	CCTR Transf	From 2200-0433.000	TPKSV20091028
to 2200-0		gineer. The	transfer w	ill bring	g together consis	200-0433 SI TSM stent placement of	135240693

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.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	<u>RefID</u>
2008	0	21	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20091028 140146440
-	permits costs (0 om 2200-0433			pond w	ith the transfer o	f Environmental	
2008	105	0	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 140612380
to 2200-0		ingineer. Th	e transfer	will bri	ng together cons	00-0480 NO TSM sistent placement	
2008	0	0	0	1.4	CCTR Transf	From 2200-0480.000	TPKSV20091028 140944590
to 2200-0	•	ingineer. Th	e transfer	will bri	ng together cons	00-0480 NO TSM distent placement	140344330
2008	0	49	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20091028 141503157
	permits costs (0 ental Labor. Fr				correspond with	the transfer of	141503157
2008 Total	167	70	0	2.2			
2009	78	0	0	0.0	CCTR Transf	From 2200-0433.000	TPKSV20100211 093528903
Transfer S Group	South Inland Er	nviromental (	costs from	TSM to	o Pipeline O&M -	- Planning Work	093320903
2009	0	0	0	1.0	CCTR Transf	From 2200-0433.000	TPKSV20100211
Transfer S Group	South Inland Er	nviromental	costs from	TSM to	o Pipeline O&M -	- Planning Work	093637670
2009	111	0	0	0.0	CCTR Transf	From 2200-0480.000	TPKSV20100211
Transfer I Group	Northern Enviro	mental cost	s from TSI	M to Pi	peline O&M - Pla	inning Work	093841907
2009	0	0	0	1.5	CCTR Transf	From 2200-0480.000	TPKSV20100211
							002017520
Transfer I Group	Northern Enviro	omental cost	s from TSI	M to Pi	peline O&M - Pla	nning Work	093917520

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:

Years
Labor
Non-Labor
NSE
Total
FTE

	In 2009\$ (000)										
	Adjus	sted-Record	Adjusted-Forecast								
2005	2006	2007	2008	2009	2010	2011	2012				
4,591	4,305	4,447	4,752	4,845	4,588	4,588	4,588				
2,385	2,855	2,426	2,384	2,345	2,479	2,479	2,479				
0	0	0	0	0	0	0	0				
6,976	7,160	6,873	7,136	7,190	7,067	7,067	7,067				
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			Foreca	Forecast Adjustments			ed-Foreca	ast	
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
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	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:

е	cast Adjustment D	etalis:					
	Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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:**

cterimation of Adjustee	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 (Non	ninal \$)				
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 (Nomina	l \$)				
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 (Con	stant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	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:**

Years
Labor
Non-Labor
NSE
Total
FTF

	In 2009\$ (000)									
	Adjus	sted-Record	Ad	justed-Fore	cast					
2005	2006	2007	2008	2009	2010	2011	2012			
5,670	6,421	5,364	5,017	5,585	5,798	7,577	8,425			
2,409	2,862	2,410	2,224	2,187	3,028	3,154	3,726			
0	0	0	0	0	0	0	0			
8,079	9,283	7,774	7,241	7,772	8,826	10,731	12,151			
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			Forec	Forecast Adjustments			ted-Forec	ast
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
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:

Ast Aujustinent		All Is a	NOE	T-4-1	FTF	Aut. Torre			
Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 Techni	cal Services Fiel	d Manager (\$	130,000 Sa	lary * 55% O&	&M = \$72,0	000)			
2010	0	0	0	0	0.6	1-Sided Adj			
New Techni	cal Services Fiel	d Manager (1	FTE * 55%	O&M = 0.6 F	TE)				
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 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 F	Rotation Progra	am (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				
	•	chnical Service Months = 0.4 F		trative Assistar	nt in Octob	oer 2009 (1 FTE				
2011	0	62	0	62	0.0	1-Sided Adj				
		ment for Field ent Cost / 3 Ye		•	(\$186,000	Total for				
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:

**2011 Total** 

1,992

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.) 0 0 2011 0 1-Sided Adj Engineering Rotation Program (6 FTEs) 2011 509 0 0 509 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 1-Sided Adj 5.3 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 1,000 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 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.

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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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	FTE A	dj Type						
2012	390	0	0	390	0.0	1-Sided Adj						
Engineering	Rotation Progr	am (6 FTEs '	* \$65,000 = \$	\$390,000)								
2012	0	0	0	0	6.0	1-Sided Adj						
Engineering	Rotation Progr	am (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 Technic	cal Services Fie	eld Manager	(\$130,000 Sa	alary * 55% O	&M = \$72,0	00)						
2012	0	0	0	0	0.6	1-Sided Adj						
New Technic	cal Services Fie	eld Manager	(1 FTE * 55%	6 O&M = 0.6 F	TE)							
2012	0	536	0	536	0.0	1-Sided Adj						
Operator Qu to Maintain p Hours Each]	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 Embe \$500,000 pe	dded System Ir er Year)	nstruction (50	00 Videos * \$	4,000/Video /	4 Years to	Complete =						
2012	1,017	0	0	1,017	0.0	1-Sided Adj						
Gas Onerati	ons Sarvicas —	Traditional S	unnort Reso	urce Rase. Δα	dition of \$1	017 000 Labor						

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

Work

gory-Sub: rpaper:	Operations Management & Training     GD004.000 - Operations Management & Training									
Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	FTE A	d <u>i Type</u>				
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				
•	ons Services - S on-Labor, and 16	• •		•						
2012	0	134	0	134	0.0	1-Sided Adj				
•	ons Services - S on-Labor, and 16	• •		•						
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
Category-Sub: 1. Operations Management & Training

Workpaper: 2GD004.000 - Operations Management & Training

#### **Determination of Adjusted-Recorded:**

ctermination of Adjustee	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 (Non	ninal \$)				
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 (Nomina	l \$)				
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 (Con	stant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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.	<u>Labor</u>	<u>NLbr</u>	NSE	<u>FTE</u>	Adj Type	From CCtr	<u>RefID</u>					
2005	0	532	0	0.0	CCTR Transf	From 2200-2023.000	TP1CSK2009092 2082951780					
Transferrir recent hist	2002301100											
2005	0	-532	0	0.0	1-Sided Adj	N/A	TPKSV20091006 133716313					
One sided Locate and into the sa	1867 1867 18											
2005	0	532	0	0.0	1-Sided Adj	N/A	TPKSV20091015					
transfer wi	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					
Coast TSN	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 o	f ST Managem	ent FTEs fo	r environm	ental	positions from 22	200-0603 Pac	12 1000077					

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

· -										
Year/Expl.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE		From CCtr	RefID			
2005	-27	0	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 140322847			
to 2200-0	_	ngineer. The	e transfer	will bri	ng together cons	00-0480 NO TSM sistent placement	110022011			
2005	0	0	0	-0.4	CCTR Transf	To 2200-0485.000	TPKSV20091028 141202763			
Transfer of to 2200-0 of Enviror	111202100									
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			
	e transfer will co			•	e O&M workgrou nd L&M expeditu	p - Locate and res into the same	100022000			
2006	0	2,592	0	0.0	1-Sided Adj	N/A	TPKSV20091015			
transfer with the sa	vill allow for the	credits to be	combined	d with t	he main and ser	e damages. This vice expenditures e made to Pipeline	115636157			
O&M. 2006	-110	0	0	0.0	CCTR Transf	To 2200-0537.000	TPKSV20091027			
Transfer of Coast TS consisten	124657970									
2006	0	0	0	-1.5	CCTR Transf	To 2200-0537.000	TPKSV20091027			
Transfer of Coast TS consisten	124747423									
2006	0	-10	0	0.0	CCTR Transf	To 2200-0537.000	TPKSV20091028			
	permits costs (Com 2200-0603 to			pond w	vith the transfer o	of Evnironmental	133751490			

Area: GAS DISTRIBUTION Witness: Orozco, Guillermina

Category: C. Operations Management & Training Category-Sub: 1. Operations Management & Training

Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	Adj Type	From CCtr	RefID				
2006	-23	0	0		CCTR Transf	To 2200-0438.000	TPKSV20091028 134520733				
to 2200-0	•	gineer. The	transfer w	ill bring	together consis	00-0433 SI TSM stent placement of					
2006	0	0	0	-0.3 (	CCTR Transf	To 2200-0438.000	TPKSV20091028 135513853				
	200-0433 SI TSM stent placement of	100010000									
2006	0	-20	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20091028 140013907				
	permits costs (Com 2200-0433 to			oond wi	th the transfer o	f Environmental	110010007				
2006	-53	0	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 140423207				
to 2200-0	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				
to 2200-0		ingineer. The	e transfer	will brin	ng together cons	200-0480 NO TSM sistent placement	111120100				
2006	0	-24	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 141318983				
	permits costs (C ental Labor. Fro				correspond with	the transfer of	141010303				
2006 Total	-186	1,956	0	-2.6							
2007	0	2,602	0	0.0	1-Sided Adj	N/A	TPKSV20091015 115752250				
transfer w	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				
to 2200-0	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 Category-Sub: 1. Operations Management & Training

Year/Expl.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	<u>ReflD</u>					
2007	0	0	0	-0.3	CCTR Transf	To 2200-0438.000	TPKSV20091028					
to 2200-0		gineer. The	transfer v	vill bring	together consis	200-0433 SI TSM stent placement of	135423570					
2007	0	-31	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20091028 140100610					
Transfer p Labor. Fro	140100010											
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 to 2200-0 of Enviror	141031610											
2007	0	-39	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 141415593					
	permits costs (0 ental Labor. Fr				correspond with	the transfer of	141413393					
2007	0	-520	0	0.0	1-Sided Adj	N/A	TPKSV20100521					
	e transfer will c			-	O&M workgrou d L&M expeditu	p - Locate and res into the same	122958800					
2007 Total	-120	2,012	0	-1.7								
2008	0	-1,088	0	0.0	CCTR Transf	To 2200-0294.000	TPKSV20090911					
repair acti Operation	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					
	e transfer will c				O&M workgrou d L&M expeditu	p - Locate and res into the same	134107880					

Area: GAS DISTRIBUTION Witness: Orozco, Guillermina

Category: C. Operations Management & Training Category-Sub: 1. Operations Management & Training

Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	FTE	Adj Type	From CCtr	<u>RefID</u>						
2008	0	2,655	0	0.0	1-Sided Adj	N/A	TPKSV20091015 115855300						
transfer w													
2008	-62	0	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20091028						
	00-0433 SI TSM stent placement of	134830860											
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						
•	permits costs (Com 2200-0433 to			ond w	ith the transfer o	f Environmental	140146440						
2008	-105	0	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20091028 140612380						
to 2200-04		ngineer. Th	e transfer	will bri	ng together cons	00-0480 NO TSM istent placement	140012300						
2008	0	0	0	-1.4	CCTR Transf	To 2200-0485.000	TPKSV20091028 140944590						
to 2200-04	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						
OpEx mis	c reimbursable	transfer for	Superviso	r Enab	lement TAs.		616114206180						

Area: GAS DISTRIBUTION Witness: Orozco, Guillermina

Category: C. Operations Management & Training Category-Sub: 1. Operations Management & Training

Year/Expl.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE	Adj Type	From CCtr	RefID				
2009	680	0	0	0.0	CCTR Transf	From 2200-2181.000	TERITRAN20100				
OpEx la	bor transfer for S	Supervisor E	nablement	TAs.			616124129497				
2009	0	0	0	7.6	CCTR Transf	From 2200-2181.000	TERITRAN20100				
OpEX F	TE transfer for S	Supervisor Er	nablement	TAs.			616125041600				
2009	0	-366	0	0.0	1-Sided Adj	N/A	TPKSV20100211				
Transfer	e & Mark	093220650									
2009	0	1,717	0	0.0	1-Sided Adj	N/A	TPKSV20100211				
Transfer Mainten	<sup>-</sup> 2009 Credits fo ance.	093327450									
2009	-78	0	0	0.0	CCTR Transf	To 2200-0438.000	TPKSV20100211 093528903				
Transfer Group	Transfer South Inland Environmental costs from TSM to Pipeline O&M - Planning Work Group										
2009	0	0	0	-1.0	CCTR Transf	To 2200-0438.000	TPKSV20100211				
Transfer Group	South Inland Er	nviromental o	costs from	TSM to	o Pipeline O&M -	Planning Work	093637670				
2009	-111	0	0	0.0	CCTR Transf	To 2200-0485.000	TPKSV20100211				
Transfer Group	Northern Enviro	omental cost	s from TSN	∕l to Pip	peline O&M - Pla	nning Work	093841907				
2009	0	0	0	-1.5	CCTR Transf	To 2200-0485.000	TPKSV20100211				
Transfer Group	Northern Enviro	omental cost	s from TSN	∕l to Pip	peline O&M - Pla	nning Work	093917520				
2009	0	-749	0	0.0	CCTR Transf	To 2200-0294.000	TPKSV20100303				
repair ad operatio	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

<u>.</u> .					2	006		2009		
Line #	Description	Cost Center		Labor		Non- Labor	FTEs	Labor	Non- Labor	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

Southern California Gas Company Test Year 2012 GRC - APP

Non-Shared Service Workpapers

	Decrease in FTEs & Dollars from 2006 to 2009:	I	2011 ncrease*	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

<sup>\*</sup> Approximately one half of the employees will be added by 1/1/11, and the other half will be added by 1/1/12.

#### 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	Per Number FTE To Be Hired By:			FTEs Totals in Each Year		Dollar Totals in Each Year (2009\$)				
		(2009\$)	of FTEs	During 2010* 1/1/11 1/1/2		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

Southern California Gas Company Test Year 2012 GRC - APP

Non-Shared Service Workpapers

<sup>\*</sup> To approximate the employees being hired during 2010, half of the cost was added in 2010 and the other half was added in 2011.

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 the 2GD005.000 Regional Pul	• •			
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 issues 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:**

Years
Labor
Non-Labor
NSE
Total
FTE

In 2009\$ (000)								
	Adjus	sted-Record	Adjusted-Forecast					
2005	2006	2007	2008	2009	2010	2011	2012	
3,024	3,140	3,173	3,046	3,135	3,135	3,135	3,135	
1,288	1,226	720	685	772	772	772	772	
0	0	0	0	0	0	0	0	
4,312	4,366	3,893	3,731	3,907	3,907	3,907	3,907	
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		Bas	e Forecas	st	Forecast Adjustments			Adjusted-Forecast			
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	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	

re	ecast Adjustment Details:										
	Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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:**

ctermination of Aujuste	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 (Nor	minal \$)				
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 (Nomina	al \$)				
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 (Cor	nstant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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:

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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	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:**

### Description

A. Operations Leadership

B. Operations Technical Support

C. USS Billed-In from SDG&E

Total

	In 2009 \$ (000) "	'Book Expense"	
Adjusted- Recorded	Adj	usted-Forecast	
2009	2010	2011	2012
255	299	299	299
602	593	593	593
264	263	263	263
1,121	1,155	1,155	1,155

Area: GAS DISTRIBUTION
Witness: Orozco, Guillermina
Category: A. Operations Leadership

Cost Center: 2200-0431.000

Total

FTE

Summary for Category: A. Operations Leadership

		In 2009\$ (000) "Boo	ok 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

299

1.2

299

1.2

299

1.2

255

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)									
		Adjus	ted-Record	ed		Adju	sted-Fored	cast		
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		
					ations 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		
					etained					
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		
					cations 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:

**Directly Retained Directly Allocated** Subj. To % Alloc. % Allocation Retained SEU CORP Unreg \$ Allocation Retained SEU **CORP** Unreg **Total Incurred** Total Alloc. Out **Total Retained** Allocations In **Book Expense** 

	2009 Adju	sted-Reco	rded			2010 Adiı	usted-Fore	ecast	
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
0	24	0	24	0.00	0	4	0	4	0.00
0	0	0	0	0.00	0	0	0	0	0.00
263	7	0	270	1.20	263	82	0	345	1.20
85.48%	85.48%				85.46%	85.46%			
14.52%	14.52%				14.54%	14.54%			
0.00%	0.00%				0.00%	0.00%			
0.00%	0.00%				0.00%	0.00%			
225	6	0	231		225	70	0	295	
38	1	0	39		38	12	0	50	
0	0	0	0		0	0	0	0	
0	0	0	0		0	0	0	0	
263	31	0	294	1.20	263	86	0	349	1.20
38	1	0	39		38	12	0	50	
225	30	0	255		225	74	0	299	
0	0	0	0		0	0	0	0	
225	30	0	255		225	74	0	299	

**Directly Retained Directly Allocated** Subj. To % Alloc. % Allocation Retained SEU CORP Unreg \$ Allocation Retained SEU CORP Unreg **Total Incurred** Total Alloc. Out **Total Retained** Allocations In **Book Expense** 

	2011 Adju	sted-Fore	cast			2012 Adju	sted-Fore	cast	
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
0	4	0	4	0.00	0	4	0	4	0.00
0	0	0	0	0.00	0	0	0	0	0.00
263	82	0	345	1.20	263	82	0	345	1.20
85.46%	85.46%				85.46%	85.46%			
14.54%	14.54%				14.54%	14.54%			
0.00%	0.00%				0.00%	0.00%			
0.00%	0.00%				0.00%	0.00%			
225	70	0	295		225	70	0	295	
38	12	0	50		38	12	0	50	
0	0	0	0		0	0	0	0	
0	0	0	0		0	0	0	0	
263	86	0	349	1.20	263	86	0	349	1.20
38	12	0	50		38	12	0	50	
225	74	0	299		225	74	0	299	
0	0	0	0		0	0	0	0	
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 20	09 \$(000) "Ir	curred Co	sts"			
Forecast	t Method	Base	e Forecas	t	Forec	ast Adjusti	ments	Adjust	ed-Foreca	st
		<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	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:

ecast Adjustment D	etails:					
Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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)	sts): 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 (Non	ninal \$)				
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
/acation & Sick (Nomina	ıl \$)				
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 (Con	stant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	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.	<u>Labor</u>	<u>NLbr</u>	NSE	FTE Adj Type	From CCtr	<u>RefID</u>
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) "Boo	k 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 2200-2023.000 FIELD TEC				
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 identification/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)						
		Adjus	ted-Record	ed		Adju	sted-Fored	cast
Years	2005	2006	2007	2008	2009	2010	2011	2012
				<b>Total Incurr</b>		_evel)		
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
					ations 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
					etained			
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
					cations 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
					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:

**Directly Retained Directly Allocated** Subj. To % Alloc. % Allocation Retained SEU CORP Unreg \$ Allocation Retained SEU **CORP** Unreg **Total Incurred** Total Alloc. Out **Total Retained** Allocations In **Book Expense** 

	2009 Adju	sted-Reco	rded			2010 Adjı	usted-Fore	ecast	
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
1	1	0	2	0.00	1	0	0	1	0.00
0	0	0	0	0.00	0	0	0	0	0.00
551	70	0	621	5.90	551	59	0	610	5.90
96.62%	96.63%				97.14%	97.14%			
3.38%	3.37%				2.86%	2.86%			
0.00%	0.00%				0.00%	0.00%			
0.00%	0.00%				0.00%	0.00%			
532	68	0	600		535	57	0	592	
19	2	0	21		16	2	0	18	
0	0	0	0		0	0	0	0	
0	0	0	0		0	0	0	0	
552	71	0	623	5.90	552	59	0	611	5.90
19	2	0	21		16	2	0	18	
533	69	0	602		536	57	0	593	
0	0	0	0		0	0	0	0	
533	69	0	602		536	57	0	593	

**Directly Retained Directly Allocated** Subj. To % Alloc. % Allocation Retained SEU CORP Unreg \$ Allocation Retained SEU CORP Unreg **Total Incurred** Total Alloc. Out **Total Retained** Allocations In **Book Expense** 

	2011 Adju	sted-Fore	cast			2012 Adju	sted-Fore	cast	
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
1	0	0	1	0.00	1	0	0	1	0.00
0	0	0	0	0.00	0	0	0	0	0.00
551	59	0	610	5.90	551	59	0	610	5.90
07.140/	97.14%				97.14%	07.140/			
97.14%						97.14%			
2.86%	2.86%				2.86%	2.86%			
0.00%	0.00%				0.00%	0.00%			
0.00%	0.00%				0.00%	0.00%			
535	57	0	592		535	57	0	592	
16	2	0	18		16	2	0	18	
0	0	0	0		0	0	0	0	
0	0	0	0		0	0	0	0	
552	59	0	611	5.90	552	59	0	611	5.90
16	2	0	18		16	2	0	18	
536	57	0	593		536	57	0	593	
0	0	0	0		0	0	0	0	<u>.</u>
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 200	09 \$(000) "Ir	curred Co	sts"				
Forecast	t Method	Base	e Forecas	t	Foreca	Forecast Adjustments			Adjusted-Forecast		
		2010	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	2012	<u>2010</u>	<u>2011</u>	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	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:**

e	cast Adjustment D	etails:					
	Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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):**

otornination of Adjusts	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 (Nor	minal \$)				
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 (Nomina	al \$)				
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 (Cor	nstant 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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	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:**

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)									
		Adjus	ted-Record		Adju	sted-Fored	cast			
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		
					ations 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		
					etained					
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	╝	
					cations 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	╝	
	212				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:

Directly Allocated
Subj. To % Alloc.
\$ Allocation
Retained
SEU
CORP
Unreg
Total Incurred
Total Retained
Allocations In
Book Expense

	2009 Adju	sted-Reco	rded		2010 Adjusted-Forecast					
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE	
0	0	0	0	0.00	0	0	0	0	0.00	
0	0	0	0	0.00	0	0	0	0	0.00	
0	0	0	0		0	0	0	0		
0	0	0	0		0	0	0	0		
0	0	0	0		0	0	0	0		
0	0	0	0		0	0	0	0		
0	0	0	0	0.00	0	0	0	0	0.00	
0	0	0	0		0	0	0	0		
238	26	0	264		238	25	0	263		
238	26	0	264		238	25	0	263		

Directly Allocated

\$ Allocation
Retained
SEU
CORP
Unreg
Allocations In
Book Expense

	2011 Adju	sted-Fore	cast		2012 Adjusted-Forecast				
Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
0	0	0	0	0.00	0	0	0	0	0.00
0	0	0	0		0	0	0	0	
0	0	0	0		0	0	0	0	
0	0	0	0		0	0	0	0	
0	0	0	0		0	0	0	0	
238	25	0	263		238	25	0	263	
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"									
Base Forecast			Forecast Adjustments			Adjusted-Forecast			
<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
0	0	0		0	0	0	0	0	
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	2010 0 0 0 0	2010         2011           0         0           0         0           0         0           0         0	Base Forecast           2010         2011         2012           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0	Base Forecast         Forecast           2010         2011         2012         2010           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0           0         0         0         0	Base Forecast         Forecast Adjust           2010         2011         2012         2010         2011           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0           0         0         0         0         0	Base Forecast         Forecast Adjustments           2010         2011         2012         2010         2011         2012           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0	Base Forecast         Forecast Adjustments         Adjustration           2010         2011         2012         2010         2011         2012         2010           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0	Base Forecast         Forecast Adjustments         Adjusted-Forecast           2010         2011         2012         2010         2011         2012         2010         2011           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0	

### Forecast Adjustment Details:

e	ecast Adjustment Details:									
	Year/Expl.	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	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 (Nomina	l \$)				
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 (Constar					
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

<sup>\*</sup> After company-wide exclusions of Non-GRC costs

<sup>\*\*</sup> 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.	<u>Labor</u>	<u>NLbr</u>	NSE	<u>FTE</u>	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 \$

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### **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	Ĺ	_abor	No	n-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	8.0		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	3,442,000	\$ 2	3,442,000	0.0	GOM-22 - GOM-23	Page 53, Lines 27 - 28
Grand Total:	\$ 1,	299,163	\$ 23	3,596,320	\$ 2	4,895,483	12.2		

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### **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

Labor		Non-Labor		Total		FTE	Testimony Reference	Workpaper Reference
\$	11,962	\$	20,762	\$	32,724	0.2	GOM-24	Page 66, Lines 4 & 8
\$	86,964	\$	-	\$	86,964	8.0	GOM-24 - GOM-25	Page 64, Line 5
							GOM-25	Pages 67 - 70
\$	6,820	\$	80,573	\$	87,393	0.1		Page 68, Lines 3 & 7
\$	13,103	\$	54,653	\$	67,756	0.1		Page 68, Line 11 & Page 69, Line 15
\$	9,436	\$	51,530	\$	60,966	0.1		Page 69, Lines 19 & 26
\$	-	\$	228,791	\$	228,791	0.0		Page 70, Line 30
\$	-	\$	279,821	\$	279,821	0.0		Page 70, Line 34
\$	29,359	\$	695,368	\$	724,727	0.3		
	<b>\$</b> \$\$ \$\$ \$\$	\$ 86,964 \$ 6,820 \$ 13,103 \$ 9,436 \$ - \$ -	\$ 86,964 \$  \$ 6,820 \$ \$ 13,103 \$ \$ 9,436 \$ \$ - \$ \$ - \$	\$ 86,964 \$ - \$ 6,820 \$ 80,573 \$ 13,103 \$ 54,653 \$ 9,436 \$ 51,530 \$ - \$ 228,791 \$ - \$ 279,821	\$ 86,964 \$ - \$  \$ 6,820 \$ 80,573 \$ 13,103 \$ 54,653 \$ 51,530 \$  \$ 9,436 \$ 51,530 \$ \$  \$ - \$ 228,791 \$ \$  \$ - \$ 279,821 \$	\$ 86,964 \$ - \$ 86,964 \$ 6,820 \$ 80,573 \$ 87,393 \$ 13,103 \$ 54,653 \$ 67,756 \$ 9,436 \$ 51,530 \$ 60,966 \$ - \$ 228,791 \$ 228,791 \$ - \$ 279,821 \$ 279,821	\$ 86,964 \$ - \$ 86,964 0.8 \$ 6,820 \$ 80,573 \$ 87,393 0.1 \$ 13,103 \$ 54,653 \$ 67,756 0.1 \$ 9,436 \$ 51,530 \$ 60,966 0.1 \$ - \$ 228,791 \$ 228,791 0.0 \$ - \$ 279,821 \$ 279,821 0.0	\$ 11,962 \$ 20,762 \$ 32,724 0.2 GOM-24 \$ 86,964 \$ - \$ 86,964 0.8 GOM-24 - GOM-25 \$ 6,820 \$ 80,573 \$ 87,393 0.1 \$ 13,103 \$ 54,653 \$ 67,756 0.1 \$ 9,436 \$ 51,530 \$ 60,966 0.1 \$ - \$ 228,791 \$ 228,791 0.0 \$ - \$ 279,821 \$ 279,821 0.0

Grand Total: \$ 128,285 \$ 716,130 \$

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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		

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Note: Total FTEs shown on work paper were inadvertently rounded up to 3; should be 2.6

Grand Total: \$ 275,117 \$ 993,783 \$ 1,268,900

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### 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	N	on-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 Requiremen Night Work	t <b>s</b> \$	9,238	\$	109,134	\$ 118,372	0.1	GOM-31	Pages 108 - 111 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 Constructio Requirements	n		\$	148,330	\$ 148,330	0.0		Page 111, Line 29
Increased Paving Requirements	\$	-	\$	224,500	\$ 224,500	0.0		Page 111, Line 33
Sub	total: \$	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
Sub	total: \$	158,920	\$	-	\$ 158,920	1.7		

Southern California Gas Company Test Year 2012 GRC - APP

Shared Services Workpapers

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	N	on-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
Subtota	al: \$	-	\$	290,073	\$ 290,073	0.0		
Miscellaneous Increased Support Requirements							GOM-35	Page 127
City/Muni Reg 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
Subtota	al: \$	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

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Grand Total: \$3,553,070 \$ 645,073 \$ 4,198,143 40.7

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### 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		N	lon-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		

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Shared Services Workpapers

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### **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	١	Non-Labor	Total	FTE	Testimony Reference		Workpaper Reference
Compliance Specialist 3 FTEs for Stormwater Compliance	\$	270,000	\$	-	\$ 270,000	3.0	GOM-39 - GOM-40	Page 145 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			

Southern California Gas Company Test Year 2012 GRC - APP

Shared Services Workpapers

### 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	N	lon-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

Cost Center	<u>Sub</u>	<u>Description</u>
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

ost Center	Sub	<u>Description</u>	
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

Cost Center	<u>Sub</u>	<u>Description</u>
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

Cost Center	Sub	<u>Description</u>
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

ost Center	Sub	<u>Description</u>
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

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Witness: Orozco, Guillermina

ost Center	Sub	<u>Description</u>
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

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Witness: Orozco, Guillermina

Cost Center	Sub	<u>Description</u>
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

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Witness: Orozco, Guillermina

Cost Center	Sub	<u>Description</u>
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

Cost Center	<u>Sub</u>	<u>Description</u>
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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ost Center	Sub	<u>Description</u>
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

ost Center	Sub	<u>Description</u>
200-0576	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
200-0577	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
200-0580	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
200-0581	000	PACIFIC COAST DISTRIB MEAS SUPV JUANITA
200-0583	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
200-0586	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
200-0588	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
200-0590	000	PACIFIC DOM SANTA MONICA & HOLLYWOOD

Area: GOGD - GAS DISTRIBUTION

Witness: Orozco, Guillermina

Cost Center	Sub	<u>Description</u>
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

Cost Center	Sub	<u>Description</u>
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

Area: GOGD - GAS DISTRIBUTION

Witness: Orozco, Guillermina

Cost Center	Sub	<u>Description</u>
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

Cost Center	Sub	<u>Description</u>
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

Cost Center	<u>Sub</u>	<u>Description</u>
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