

Application of SOUTHERN CALIFORNIA GAS )  
COMPANY for authority to update its gas revenue )  
requirement and base rates )  
effective January 1, 2019 (U 904-G) )

Application No. 17-10-\_\_\_\_

Exhibit No.: (SCG-22-WP)

WORKPAPERS TO  
PREPARED DIRECT TESTIMONY  
OF DENITA A. WILLOUGHBY  
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

OCTOBER 2017



**2019 General Rate Case - APP  
INDEX OF WORKPAPERS**

**Exhibit SCG-22-WP - SUPPLY MANAGEMENT & SUPPLIER DIVERSITY**

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**Overall Summary For Exhibit No. SCG-22-WP**

<b>Area:</b>	<b>SUPPLY MANAGEMENT &amp; SUPPLIER DIVERSITY</b>
<b>Witness:</b>	<b>Denita A. Willoughby</b>

Description	In 2016 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
<b>Non-Shared Services</b>	17,058	19,941	15,186	16,203
<b>Shared Services</b>	493	520	520	520
<b>Total</b>	<b>17,551</b>	<b>20,461</b>	<b>15,706</b>	<b>16,723</b>

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby

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

Description	In 2016 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
A. CATEGORY MANAGEMENT	2,524	4,042	-813	-1,200
B. INVENTORY MANAGEMENT	11,361	11,938	11,938	13,342
C. SUPPLIER DIVERSITY	687	1,051	1,151	1,151
D. OFFICE SERVICES	2,486	2,910	2,910	2,910
<b>Total</b>	<b>17,058</b>	<b>19,941</b>	<b>15,186</b>	<b>16,203</b>

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: A. CATEGORY MANAGEMENT  
Workpaper: VARIOUS

**Summary for Category: A. CATEGORY MANAGEMENT**

	In 2016\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Labor	2,011	2,570	2,334	2,321
Non-Labor	511	1,472	-3,147	-3,521
NSE	0	0	0	0
<b>Total</b>	<b>2,522</b>	<b>4,042</b>	<b>-813</b>	<b>-1,200</b>
FTE	22.6	26.9	21.4	21.3

**Workpapers belonging to this Category:**

**2SS004.000 PROCUREMENT**

Labor	1,389	1,890	1,654	1,641
Non-Labor	36	886	-3,733	-4,107
NSE	0	0	0	0
<b>Total</b>	<b>1,425</b>	<b>2,776</b>	<b>-2,079</b>	<b>-2,466</b>
FTE	15.0	19.9	14.4	14.3

**2SS005.000 SUPPLIER EXCELLENCE**

Labor	645	680	680	680
Non-Labor	467	586	586	586
NSE	0	0	0	0
<b>Total</b>	<b>1,112</b>	<b>1,266</b>	<b>1,266</b>	<b>1,266</b>
FTE	7.3	7.0	7.0	7.0

**2SS008.000 PSEP PORTFOLIO MGMT**

Labor	-23	0	0	0
Non-Labor	8	0	0	0
NSE	0	0	0	0
<b>Total</b>	<b>-15</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.3	0.0	0.0	0.0

Note: Totals may include rounding differences.

**Beginning of Workpaper**  
**2SS004.000 - PROCUREMENT**

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. CATEGORY MANAGEMENT  
 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS004.000 - PROCUREMENT

**Activity Description:**

These cost centers provide procurement services for all departments of SoCalGas.

**Forecast Explanations:**

**Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**Non-Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**NSE - 5-YR Average**

N/A

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		1,525	1,782	1,562	1,576	1,389	1,890	1,654	1,641	
Non-Labor		89	68	25	38	36	886	-3,733	-4,107	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>1,614</b>	<b>1,849</b>	<b>1,587</b>	<b>1,614</b>	<b>1,426</b>	<b>2,776</b>	<b>-2,079</b>	<b>-2,466</b>	
FTE		17.0	20.9	17.5	17.4	15.0	19.9	14.4	14.3	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: A. CATEGORY MANAGEMENT  
Category-Sub: 1. CATEGORY MANAGEMENT  
Workpaper: 2SS004.000 - PROCUREMENT

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	5-YR Average	1,567	1,567	1,567	323	87	74	1,890	1,654	1,641
Non-Labor	5-YR Average	51	51	51	835	-3,784	-4,158	886	-3,733	-4,107
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>1,618</b>	<b>1,618</b>	<b>1,618</b>	<b>1,158</b>	<b>-3,697</b>	<b>-4,084</b>	<b>2,776</b>	<b>-2,079</b>	<b>-2,466</b>
FTE	5-YR Average	17.6	17.6	17.6	2.3	-3.2	-3.3	19.9	14.4	14.3

**Forecast Adjustment Details:**

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID	
2017	FOF-Ongoing	330	262	0	592	2.3	1-Sided Adj	JPUND20170310125236210	
<b>Explanation:</b>		FOF Group 101 - Ongoing costs to achieve cross organizational initiatives. Partial year funding for 3 FTE and annual licensing fees for newly implemented software.							
2017	Other	25	0	0	25	0.3	1-Sided Adj	JPUND20170307170714990	
<b>Explanation:</b>		RESUMPTION OF ROUTINE CONTRACTING WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
2017	FOF-Ongoing	-32	-139	0	-171	-0.3	1-Sided Adj	JPUND20170310130148330	
<b>Explanation:</b>		FOF GROUP 21 - SUPPLY MANAGEMENT EFFICIENCIES							
2017	FOF-Implementation	0	1,598	0	1,598	0.0	1-Sided Adj	KHART20170315123914720	
<b>Explanation:</b>		FOF Group 101 - Implementation costs to achieve cross organizational initiatives.							
2017	FOF-Implementation	0	8	0	8	0.0	1-Sided Adj	KHART20170315154559607	
<b>Explanation:</b>		FOF Group 21 - Implementation costs to achieve cross organizational initiatives.							
2017	FOF-Ongoing	0	-402	0	-402	0.0	1-Sided Adj	JKLONG20170719160021753	
<b>Explanation:</b>		FOF Group 101 - Procurement Benefits							
2017	FOF-Ongoing	0	-492	0	-492	0.0	1-Sided Adj	JKLONG20170721153556267	
<b>Explanation:</b>		FOF Group 101 - Gas Storage and Gas Transmission Procurement Benefits							
<b>2017 Total</b>		<b>323</b>	<b>835</b>	<b>0</b>	<b>1,158</b>	<b>2.3</b>			

2018 FOF-Ongoing 360 203 0 563 3.0 1-Sided Adj JPUND20170310125323503

Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. CATEGORY MANAGEMENT  
 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS004.000 - PROCUREMENT

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID
<b>Explanation:</b>		FOF Group 101 - Ongoing costs to achieve cross organizational initiatives. Full year funding for 3 FTE and annual licensing fees for newly implemented software.						
2018	Other	25	0	0	25	0.3	1-Sided Adj	JPUND20170307170731837
<b>Explanation:</b>		RESUMPTION OF ROUTINE CONTRACTING WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS						
2018	Other	323	0	0	323	0.0	1-Sided Adj	JPUND20170309161938967
<b>Explanation:</b>		Compensation adjustment for expanded roles in procurement to Category Management.						
2018	FOF-Ongoing	-621	-286	0	-907	-6.5	1-Sided Adj	JPUND20170310131256977
<b>Explanation:</b>		FOF GROUP 21 - SUPPLY MANAGEMENT EFFICIENCIES						
2018	FOF-Implementation	0	266	0	266	0.0	1-Sided Adj	KHART20170315124829333
<b>Explanation:</b>		FOF Group 101 - Implementation costs to achieve cross organizational initiatives.						
2018	FOF-Ongoing	0	-1,824	0	-1,824	0.0	1-Sided Adj	JKLONG20170719160051363
<b>Explanation:</b>		FOF Group 101 - Procurement Benefits						
2018	FOF-Ongoing	0	-2,143	0	-2,143	0.0	1-Sided Adj	JKLONG20170721153624323
<b>Explanation:</b>		FOF Group 101 - Gas Storage and Gas Transmission Procurement Benefits						
<b>2018 Total</b>		<b>87</b>	<b>-3,784</b>	<b>0</b>	<b>-3,697</b>	<b>-3.2</b>		
2019	Other	25	0	0	25	0.3	1-Sided Adj	JPUND20170307170750493
<b>Explanation:</b>		RESUMPTION OF ROUTINE CONTRACTING WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS						
2019	FOF-Implementation	0	14	0	14	0.0	1-Sided Adj	KHART20170315154751150
<b>Explanation:</b>		FOF Group 21 - Implementation costs to achieve cross organizational initiatives.						
2019	Other	323	0	0	323	0.0	1-Sided Adj	JPUND20170309162002917
<b>Explanation:</b>		Compensation adjustment for expanded roles in procurement to Category Management.						
2019	FOF-Ongoing	361	203	0	564	3.0	1-Sided Adj	JPUND20170310125712117
<b>Explanation:</b>		FOF Group 101 - Ongoing costs to achieve cross organizational initiatives. Partial year funding for 3 FTE and annual licensing fees for newly implemented software.						

Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. CATEGORY MANAGEMENT  
 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS004.000 - PROCUREMENT

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>	<u>RefID</u>
2019	FOF-Ongoing	-635	-316	0	-951	-6.6	1-Sided Adj	JPUND20170310131357997
<b>Explanation:</b>		FOF GROUP 21 - SUPPLY MANAGEMENT EFFICIENCIES						
2019	FOF-Ongoing	0	-1,865	0	-1,865	0.0	1-Sided Adj	JKLONG20170719160118050
<b>Explanation:</b>		FOF Group 101 - Procurement Benefits						
2019	FOF-Ongoing	0	-2,194	0	-2,194	0.0	1-Sided Adj	JKLONG20170721153648170
<b>Explanation:</b>		FOF Group 101 - Gas Storage and Gas Transmission Procurement Benefits						
<b>2019 Total</b>		<b>74</b>	<b>-4,158</b>	<b>0</b>	<b>-4,084</b>	<b>-3.3</b>		

Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: A. CATEGORY MANAGEMENT  
Category-Sub: 1. CATEGORY MANAGEMENT  
Workpaper: 2SS004.000 - PROCUREMENT

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	1,197	1,425	1,281	1,335	1,345
Non-Labor	86	67	25	38	36
NSE	0	0	0	0	0
<b>Total</b>	<b>1,283</b>	<b>1,492</b>	<b>1,306</b>	<b>1,373</b>	<b>1,381</b>
FTE	14.6	17.9	15.0	15.0	14.1
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	-11	-152
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-11</b>	<b>-152</b>
FTE	0.0	0.0	0.0	0.0	-1.3
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	1,197	1,425	1,281	1,324	1,193
Non-Labor	86	67	25	38	36
NSE	0	0	0	0	0
<b>Total</b>	<b>1,283</b>	<b>1,492</b>	<b>1,306</b>	<b>1,362</b>	<b>1,229</b>
FTE	14.6	17.9	15.0	15.0	12.8
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	192	237	209	214	196
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>192</b>	<b>237</b>	<b>209</b>	<b>214</b>	<b>196</b>
FTE	2.4	3.0	2.5	2.5	2.2
<b>Escalation to 2016\$</b>					
Labor	136	120	72	38	0
Non-Labor	2	1	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>139</b>	<b>121</b>	<b>72</b>	<b>38</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	1,525	1,782	1,562	1,576	1,389
Non-Labor	89	68	25	38	36
NSE	0	0	0	0	0
<b>Total</b>	<b>1,614</b>	<b>1,849</b>	<b>1,587</b>	<b>1,614</b>	<b>1,426</b>
FTE	17.0	20.9	17.5	17.5	15.0

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. CATEGORY MANAGEMENT  
 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS004.000 - PROCUREMENT

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	-11	-152
Non-Labor	0	0	0	0	-0.089
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-11</b>	<b>-152</b>
FTE	0.0	0.0	0.0	0.0	-1.3

**Detail of Adjustments to Recorded:**

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
<b>2012 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2013 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2014 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
2015	Aliso	-4	0	0	0.0	1-Sided Adj	JPUND20161121111708973
<b>Explanation:</b> ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.							
2015	Aliso	-7	0	0	0.0	1-Sided Adj	JPUND20161121112111203
<b>Explanation:</b> ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.							
<b>2015 Total</b>		<b>-11</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
2016	Aliso	-3	0	0	0.0	1-Sided Adj	JPUND20161121111751527
<b>Explanation:</b> ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.							
2016	Aliso	-122	0	0	-1.3	1-Sided Adj	JPUND20161121112145627
<b>Explanation:</b> ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.							
2016	Other	-27	0	0	0.0	CCTR Transf To 2200-2352.000	JPUND20170221145415710
<b>Explanation:</b> SUPPLIER DIVERSITY - LABOR DOLLARS MISALLOCATED IN SAP DUE TO MYTIME COST CENTER ASSIGNMENT ERRORS. BELONGS TO 2200-2352.							
<b>2016 Total</b>		<b>-152</b>	<b>0</b>	<b>0</b>	<b>-1.3</b>		

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2SS005.000 - SUPPLIER EXCELLENCE**

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. CATEGORY MANAGEMENT  
 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS005.000 - SUPPLIER EXCELLENCE

**Activity Description:**

Supplier Excellence was created in 2013 to provide company wide supply management support such as procurement analytics and reporting, process improvement study, supply chain and sustainability, and supplier relationship management. The Smaller Contract Opportunity Realization Effort (SCORE) is also managed from this cost center and related outreach.

**Forecast Explanations:**

**Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**Non-Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**NSE - 5-YR Average**

N/A

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		362	635	758	895	645	680	680	680	
Non-Labor		34	545	410	1,099	467	586	586	586	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>396</b>	<b>1,180</b>	<b>1,168</b>	<b>1,994</b>	<b>1,113</b>	<b>1,266</b>	<b>1,266</b>	<b>1,266</b>	
FTE		2.9	6.6	7.8	9.0	7.4	7.0	7.0	7.0	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: A. CATEGORY MANAGEMENT  
Category-Sub: 1. CATEGORY MANAGEMENT  
Workpaper: 2SS005.000 - SUPPLIER EXCELLENCE

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	5-YR Average	659	659	659	21	21	21	680	680	680
Non-Labor	5-YR Average	511	511	511	75	75	75	586	586	586
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>1,170</b>	<b>1,170</b>	<b>1,170</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>1,266</b>	<b>1,266</b>	<b>1,266</b>
FTE	5-YR Average	6.7	6.7	6.7	0.3	0.3	0.3	7.0	7.0	7.0

**Forecast Adjustment Details:**

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID
2017	Other	21	0	0	21	0.3	1-Sided Adj	JPUND20170307170215097
<b>Explanation:</b>	RESUMPTION OF ROUTINE ANALYTICS WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
2017	Other	0	75	0	75	0.0	1-Sided Adj	JPUND20170310132034703
<b>Explanation:</b>	IBIS SOFTWARE SUBSCRIPTION							
<b>2017 Total</b>		<b>21</b>	<b>75</b>	<b>0</b>	<b>96</b>	<b>0.3</b>		
2018	Other	21	0	0	21	0.3	1-Sided Adj	JPUND20170307170255333
<b>Explanation:</b>	RESUMPTION OF ROUTINE ANALYTICS WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
2018	Other	0	75	0	75	0.0	1-Sided Adj	JPUND20170310132052520
<b>Explanation:</b>	IBIS SOFTWARE SUBSCRIPTION							
<b>2018 Total</b>		<b>21</b>	<b>75</b>	<b>0</b>	<b>96</b>	<b>0.3</b>		
2019	Other	21	0	0	21	0.3	1-Sided Adj	JPUND20170307170313050
<b>Explanation:</b>	RESUMPTION OF ROUTINE ANALYTICS WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
2019	Other	0	75	0	75	0.0	1-Sided Adj	JPUND20170310132113833
<b>Explanation:</b>	IBIS SOFTWARE SUBSCRIPTION							

Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
 2019 GRC - APP  
 Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. CATEGORY MANAGEMENT  
 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS005.000 - SUPPLIER EXCELLENCE

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>	<u>RefID</u>
<b>2019 Total</b>		21	75	0	96	0.3		

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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: A. CATEGORY MANAGEMENT  
Category-Sub: 1. CATEGORY MANAGEMENT  
Workpaper: 2SS005.000 - SUPPLIER EXCELLENCE

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	284	508	621	752	777
Non-Labor	33	539	411	1,096	585
NSE	0	0	0	0	0
<b>Total</b>	<b>317</b>	<b>1,047</b>	<b>1,032</b>	<b>1,848</b>	<b>1,362</b>
FTE	2.5	5.7	6.7	7.7	7.8
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	-223
Non-Labor	0	0	0	0	-117
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-341</b>
FTE	0.0	0.0	0.0	0.0	-1.6
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	284	508	621	752	554
Non-Labor	33	539	411	1,096	467
NSE	0	0	0	0	0
<b>Total</b>	<b>317</b>	<b>1,047</b>	<b>1,032</b>	<b>1,848</b>	<b>1,021</b>
FTE	2.5	5.7	6.7	7.7	6.2
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	45	84	101	122	91
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>45</b>	<b>84</b>	<b>101</b>	<b>122</b>	<b>91</b>
FTE	0.4	1.0	1.1	1.3	1.1
<b>Escalation to 2016\$</b>					
Labor	32	43	35	21	0
Non-Labor	1	7	-1	3	0
NSE	0	0	0	0	0
<b>Total</b>	<b>33</b>	<b>50</b>	<b>34</b>	<b>24</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	362	635	758	895	645
Non-Labor	34	545	410	1,099	467
NSE	0	0	0	0	0
<b>Total</b>	<b>396</b>	<b>1,180</b>	<b>1,168</b>	<b>1,994</b>	<b>1,113</b>
FTE	2.9	6.7	7.8	9.0	7.3

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. CATEGORY MANAGEMENT  
 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS005.000 - SUPPLIER EXCELLENCE

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	0	-223
Non-Labor	0	0	0	0	-117
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-341</b>
FTE	0.0	0.0	0.0	0.0	-1.6

**Detail of Adjustments to Recorded:**

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
<b>2012 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2013 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2014 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2015 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
2016	Other	-118	0	0	0.0	CCTR Transf To 2200-2352.000	JPUND20170221145604097
<b>Explanation:</b>		SUPPLIER DIVERSITY - LABOR DOLLARS MISALLOCATED IN SAP DUE TO MYTIME COST CENTER ASSIGNMENT ERRORS. BELONGS TO 2200-2352.					
2016	Other	0	-117	0	0.0	CCTR Transf To 2200-2352.000	JPUND20170221145903143
<b>Explanation:</b>		SUPPLIER DIVERSITY - NONLABOR DOLLARS FOR SUPPLIER DIVERSITY PROGRAM EXPENSES, MISALLOCATED IN SAP DUE TO COST CENTER ASSIGNMENT ERRORS DURING INVOICE PROCESSING. BELONGS TO 2200-2352.					
2016	Aliso	-106	-1	0	-1.6	1-Sided Adj	JPUND20170223153357017
<b>Explanation:</b>		ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.					
<b>2016 Total</b>		<b>-223</b>	<b>-117</b>	<b>0</b>	<b>-1.6</b>		

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2SS008.000 - PSEP PORTFOLIO MGMT**

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. CATEGORY MANAGEMENT  
 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS008.000 - PSEP PORTFOLIO MGMT

**Activity Description:**

This cost center provides portfolio management and procurement support related to PSEP. Historical O&M costs are nominal.

**Forecast Explanations:**

**Labor - Zero-Based**

Zero based method was chosen with \$0 in forecast; this cost center is 100% planned to capital in 2017-2019

**Non-Labor - Zero-Based**

Zero based method was chosen with \$0 in forecast; this cost center is 100% planned to capital in 2017-2019

**NSE - Zero-Based**

N/A

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		0	0	16	0	-23	0	0	0	
Non-Labor		1	2	3	1	8	0	0	0	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>1</b>	<b>2</b>	<b>19</b>	<b>1</b>	<b>-15</b>	<b>0</b>	<b>0</b>	<b>0</b>	
FTE		0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	

*Note: Totals may include rounding differences.*

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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
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 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS008.000 - PSEP PORTFOLIO MGMT

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	Zero-Based	0	0	0	0	0	0	0	0	0
Non-Labor	Zero-Based	0	0	0	0	0	0	0	0	0
NSE	Zero-Based	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	Zero-Based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
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Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: A. CATEGORY MANAGEMENT  
Category-Sub: 1. CATEGORY MANAGEMENT  
Workpaper: 2SS008.000 - PSEP PORTFOLIO MGMT

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	0	0	13	0	-8
Non-Labor	0	2	3	1	8
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>2</b>	<b>16</b>	<b>1</b>	<b>0</b>
FTE	0.0	0.0	0.2	0.0	0.3
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	-12
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-12</b>
FTE	0.0	0.0	0.0	0.0	-0.1
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	0	0	13	0	-19
Non-Labor	0	2	3	1	8
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>2</b>	<b>16</b>	<b>1</b>	<b>-12</b>
FTE	0.0	0.0	0.2	0.0	0.2
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	0	0	2	0	-3
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>-3</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Escalation to 2016\$</b>					
Labor	0	0	1	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	0	0	16	0	-23
Non-Labor	1	2	3	1	8
NSE	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>2</b>	<b>19</b>	<b>1</b>	<b>-15</b>
FTE	0.0	0.0	0.2	0.0	0.2

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
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 Category: A. CATEGORY MANAGEMENT  
 Category-Sub: 1. CATEGORY MANAGEMENT  
 Workpaper: 2SS008.000 - PSEP PORTFOLIO MGMT

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	0	-12
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-12</b>
FTE	0.0	0.0	0.0	0.0	-0.1

**Detail of Adjustments to Recorded:**

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
<b>2012 Total</b>		0	0	0	0.0		
<b>2013 Total</b>		0	0	0	0.0		
<b>2014 Total</b>		0	0	0	0.0		
<b>2015 Total</b>		0	0	0	0.0		
2016	Aliso	-12	0	0	-0.1	1-Sided Adj	JPUND20170306124615280
<b>2016 Total</b>		<b>-12</b>	<b>0</b>	<b>0</b>	<b>-0.1</b>		

**Explanation:** ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.

*Note: Totals may include rounding differences.*

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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: B. INVENTORY MANAGEMENT  
Workpaper: VARIOUS

**Summary for Category: B. INVENTORY MANAGEMENT**

	In 2016\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Labor	9,049	9,195	9,195	10,599
Non-Labor	2,311	2,744	2,744	2,744
NSE	0	0	0	0
<b>Total</b>	<b>11,360</b>	<b>11,939</b>	<b>11,939</b>	<b>13,343</b>
FTE	116.3	117.6	117.6	136.6

**Workpapers belonging to this Category:**

**2SS001.000 LOGISTICS & SHOPS - POOL WAREHOUSING**

Labor	6,395	6,452	6,452	7,235
Non-Labor	320	431	431	431
NSE	0	0	0	0
<b>Total</b>	<b>6,715</b>	<b>6,883</b>	<b>6,883</b>	<b>7,666</b>
FTE	81.7	82.6	82.6	92.6

**2SS002.000 METER SHOP & RECORDS**

Labor	1,411	1,406	1,406	2,027
Non-Labor	345	390	390	390
NSE	0	0	0	0
<b>Total</b>	<b>1,756</b>	<b>1,796</b>	<b>1,796</b>	<b>2,417</b>
FTE	20.3	19.7	19.7	28.7

**2SS003.000 FABRICATION & REPAIR**

Labor	1,243	1,337	1,337	1,337
Non-Labor	1,646	1,923	1,923	1,923
NSE	0	0	0	0
<b>Total</b>	<b>2,889</b>	<b>3,260</b>	<b>3,260</b>	<b>3,260</b>
FTE	14.3	15.3	15.3	15.3

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2SS001.000 - LOGISTICS & SHOPS - POOL WAREHOUSING**

Southern California Gas Company  
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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. INVENTORY MANAGEMENT  
 Category-Sub: 1. INVENTORY MANAGEMENT  
 Workpaper: 2SS001.000 - LOGISTICS & SHOPS - POOL WAREHOUSING

**Activity Description:**

The Pool purchasing & warehouse group consist primarily of labor charges. Materials for job direct purchases is procured by regional logistics analysts and storeroom inventory is procured by material requirements planners. The labor and associated non-labor is within this workgroup.

**Forecast Explanations:**

**Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**Non-Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**NSE - 5-YR Average**

N/A

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		6,445	6,508	6,477	6,434	6,395	6,452	6,452	7,235	
Non-Labor		508	375	584	367	320	431	431	431	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>6,953</b>	<b>6,883</b>	<b>7,061</b>	<b>6,801</b>	<b>6,715</b>	<b>6,883</b>	<b>6,883</b>	<b>7,666</b>	
FTE		83.4	83.1	83.1	81.7	81.7	82.6	82.6	92.6	

*Note: Totals may include rounding differences.*

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 Category-Sub: 1. INVENTORY MANAGEMENT  
 Workpaper: 2SS001.000 - LOGISTICS & SHOPS - POOL WAREHOUSING

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	5-YR Average	6,452	6,452	6,452	0	0	783	6,452	6,452	7,235
Non-Labor	5-YR Average	431	431	431	0	0	0	431	431	431
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>6,883</b>	<b>6,883</b>	<b>6,883</b>	<b>0</b>	<b>0</b>	<b>783</b>	<b>6,883</b>	<b>6,883</b>	<b>7,666</b>
FTE	5-YR Average	82.6	82.6	82.6	0.0	0.0	10.0	82.6	82.6	92.6

**Forecast Adjustment Details:**

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID
<b>2017 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2018 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
2019	Other	783	0	0	783	10.0	1-Sided Adj	JPUND20170309163612930
<b>2019 Total</b>		<b>783</b>	<b>0</b>	<b>0</b>	<b>783</b>	<b>10.0</b>		

**Explanation:** 8 REPRESENTED FTE TO MANAGE ADDITIONAL MATERIAL REQUIREMENTS IN INVENTORY, 1 MATERIALS REQUIREMENT ADVISOR, 1 SUPERVISOR TO MANAGE THE REPRESENTED EMPLOYEES & ADDITIONAL WAREHOUSE

Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: B. INVENTORY MANAGEMENT  
Category-Sub: 1. INVENTORY MANAGEMENT  
Workpaper: 2SS001.000 - LOGISTICS & SHOPS - POOL WAREHOUSING

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	5,058	5,205	5,310	5,405	5,491
Non-Labor	494	370	586	366	320
NSE	0	0	0	0	0
<b>Total</b>	<b>5,552</b>	<b>5,575</b>	<b>5,896</b>	<b>5,772</b>	<b>5,811</b>
FTE	71.5	71.1	71.2	69.9	69.9
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	5,058	5,205	5,310	5,405	5,491
Non-Labor	494	370	586	366	320
NSE	0	0	0	0	0
<b>Total</b>	<b>5,552</b>	<b>5,575</b>	<b>5,896</b>	<b>5,772</b>	<b>5,811</b>
FTE	71.5	71.1	71.2	69.9	69.9
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	810	865	867	875	904
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>810</b>	<b>865</b>	<b>867</b>	<b>875</b>	<b>904</b>
FTE	11.9	12.0	11.9	11.8	11.8
<b>Escalation to 2016\$</b>					
Labor	576	439	301	154	0
Non-Labor	14	5	-2	1	0
NSE	0	0	0	0	0
<b>Total</b>	<b>590</b>	<b>443</b>	<b>299</b>	<b>155</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	6,445	6,508	6,477	6,434	6,395
Non-Labor	508	375	584	367	320
NSE	0	0	0	0	0
<b>Total</b>	<b>6,953</b>	<b>6,883</b>	<b>7,061</b>	<b>6,801</b>	<b>6,715</b>
FTE	83.4	83.1	83.1	81.7	81.7

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. INVENTORY MANAGEMENT  
 Category-Sub: 1. INVENTORY MANAGEMENT  
 Workpaper: 2SS001.000 - LOGISTICS & SHOPS - POOL WAREHOUSING

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
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*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2SS002.000 - METER SHOP & RECORDS**

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. INVENTORY MANAGEMENT  
 Category-Sub: 1. INVENTORY MANAGEMENT  
 Workpaper: 2SS002.000 - METER SHOP & RECORDS

**Activity Description:**

Meter Shop & Records supports the field requirements for Meters and MTU's such as planned meter changes, high bill investigations, new business, and routine meter changes. The Meter Shop also tests, repairs, and salvages Meters and MTU's previously removed from service. The Meter Records group tracks, reports, and reconciles all activity related to the life cycle of Meters and MTU's.

**Forecast Explanations:**

**Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**Non-Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**NSE - 5-YR Average**

N/A

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		1,560	1,355	1,367	1,271	1,411	1,405	1,405	2,026	
Non-Labor		498	426	332	347	345	390	390	390	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>2,058</b>	<b>1,782</b>	<b>1,699</b>	<b>1,618</b>	<b>1,757</b>	<b>1,795</b>	<b>1,795</b>	<b>2,416</b>	
FTE		22.1	18.8	19.0	17.7	20.3	19.7	19.7	28.7	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. INVENTORY MANAGEMENT  
 Category-Sub: 1. INVENTORY MANAGEMENT  
 Workpaper: 2SS002.000 - METER SHOP & RECORDS

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	5-YR Average	1,393	1,393	1,393	13	13	634	1,406	1,406	2,027
Non-Labor	5-YR Average	390	390	390	0	0	0	390	390	390
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>1,783</b>	<b>1,783</b>	<b>1,783</b>	<b>13</b>	<b>13</b>	<b>634</b>	<b>1,796</b>	<b>1,796</b>	<b>2,417</b>
FTE	5-YR Average	19.6	19.6	19.6	0.1	0.1	9.1	19.7	19.7	28.7

**Forecast Adjustment Details:**

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID	
2017	Other	13	0	0	13	0.1	1-Sided Adj	JPUND20170307165928250	
<b>Explanation:</b>		RESUMPTION OF ROUTINE REPAIR WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2017 Total</b>		<b>13</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0.1</b>			
2018	Other	13	0	0	13	0.1	1-Sided Adj	JPUND20170307170420460	
<b>Explanation:</b>		RESUMPTION OF ROUTINE REPAIR WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2018 Total</b>		<b>13</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0.1</b>			
2019	Other	621	0	0	621	9.0	1-Sided Adj	JPUND20161205150439677	
<b>Explanation:</b>		ADVANCED METER costs prior to 2019 are balanced in the Advanced Metering infrastructure Balancing Account, and therefore are not reflected in the historical data and the 2017/2018 forecasts. Labor adjustment \$ based upon cost center average times 9 FTE.							
2019	Other	13	0	0	13	0.1	1-Sided Adj	JPUND20170307170536223	
<b>Explanation:</b>		RESUMPTION OF ROUTINE REPAIR WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2019 Total</b>		<b>634</b>	<b>0</b>	<b>0</b>	<b>634</b>	<b>9.1</b>			

Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: B. INVENTORY MANAGEMENT  
Category-Sub: 1. INVENTORY MANAGEMENT  
Workpaper: 2SS002.000 - METER SHOP & RECORDS

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	1,224	1,084	1,120	1,068	1,279
Non-Labor	484	421	333	346	346
NSE	0	0	0	0	0
<b>Total</b>	<b>1,709</b>	<b>1,505</b>	<b>1,453</b>	<b>1,414</b>	<b>1,625</b>
FTE	19.0	16.1	16.3	15.2	18.1
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	-67
Non-Labor	0	0	0	0	-1
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-68</b>
FTE	0.0	0.0	0.0	0.0	-0.7
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	1,224	1,084	1,120	1,068	1,212
Non-Labor	484	421	333	346	345
NSE	0	0	0	0	0
<b>Total</b>	<b>1,709</b>	<b>1,505</b>	<b>1,453</b>	<b>1,414</b>	<b>1,557</b>
FTE	19.0	16.1	16.3	15.2	17.4
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	196	180	183	173	200
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>196</b>	<b>180</b>	<b>183</b>	<b>173</b>	<b>200</b>
FTE	3.2	2.7	2.7	2.6	2.9
<b>Escalation to 2016\$</b>					
Labor	139	91	63	30	0
Non-Labor	14	5	-1	1	0
NSE	0	0	0	0	0
<b>Total</b>	<b>153</b>	<b>97</b>	<b>62</b>	<b>31</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	1,560	1,355	1,367	1,271	1,411
Non-Labor	498	426	332	347	345
NSE	0	0	0	0	0
<b>Total</b>	<b>2,058</b>	<b>1,782</b>	<b>1,699</b>	<b>1,618</b>	<b>1,757</b>
FTE	22.2	18.8	19.0	17.8	20.3

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. INVENTORY MANAGEMENT  
 Category-Sub: 1. INVENTORY MANAGEMENT  
 Workpaper: 2SS002.000 - METER SHOP & RECORDS

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	0	-67
Non-Labor	0	0	0	0	-0.938
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-68</b>
FTE	0.0	0.0	0.0	0.0	-0.7

**Detail of Adjustments to Recorded:**

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
<b>2012 Total</b>		0	0	0	0.0		
<b>2013 Total</b>		0	0	0	0.0		
<b>2014 Total</b>		0	0	0	0.0		
<b>2015 Total</b>		0	0	0	0.0		
2016	Aliso	-67	-1	0	-0.7	1-Sided Adj	JPUND20170223152945480
<b>2016 Total</b>		<b>-67</b>	<b>-1</b>	<b>0</b>	<b>-0.7</b>		

**Explanation:** ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2SS003.000 - FABRICATION & REPAIR**

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. INVENTORY MANAGEMENT  
 Category-Sub: 1. INVENTORY MANAGEMENT  
 Workpaper: 2SS003.000 - FABRICATION & REPAIR

**Activity Description:**

This cost center supports the field requirements for fabricated materials, such as wedding bands, canopies, pre-fabricated regulator stations, shop modified pressure control fittings and specialty tools. They are also a supplier of approximately 300 inventoried materials which are distributed by the Pico Rivera general warehouse. The shop also performs maintenance, repair and calibration on pneumatic, hydraulic, electronic and gas driven tools and equipment.

**Forecast Explanations:**

**Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**Non-Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**NSE - 5-YR Average**

N/A

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		1,402	1,315	1,393	1,331	1,243	1,337	1,337	1,337	
Non-Labor		1,914	2,095	1,917	2,041	1,646	1,923	1,923	1,923	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>3,316</b>	<b>3,410</b>	<b>3,310</b>	<b>3,373</b>	<b>2,889</b>	<b>3,260</b>	<b>3,260</b>	<b>3,260</b>	
FTE		16.0	15.0	15.8	15.2	14.2	15.3	15.3	15.3	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. INVENTORY MANAGEMENT  
 Category-Sub: 1. INVENTORY MANAGEMENT  
 Workpaper: 2SS003.000 - FABRICATION & REPAIR

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	5-YR Average	1,337	1,337	1,337	0	0	0	1,337	1,337	1,337
Non-Labor	5-YR Average	1,923	1,923	1,923	0	0	0	1,923	1,923	1,923
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>3,260</b>	<b>3,260</b>	<b>3,260</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,260</b>	<b>3,260</b>	<b>3,260</b>
FTE	5-YR Average	15.3	15.3	15.3	0.0	0.0	0.0	15.3	15.3	15.3

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
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Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: B. INVENTORY MANAGEMENT  
Category-Sub: 1. INVENTORY MANAGEMENT  
Workpaper: 2SS003.000 - FABRICATION & REPAIR

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	1,100	1,052	1,142	1,119	1,068
Non-Labor	1,861	2,069	1,923	2,036	1,646
NSE	0	0	0	0	0
<b>Total</b>	<b>2,961</b>	<b>3,121</b>	<b>3,066</b>	<b>3,155</b>	<b>2,713</b>
FTE	13.7	12.8	13.5	13.0	12.2
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	1,100	1,052	1,142	1,119	1,068
Non-Labor	1,861	2,069	1,923	2,036	1,646
NSE	0	0	0	0	0
<b>Total</b>	<b>2,961</b>	<b>3,121</b>	<b>3,066</b>	<b>3,155</b>	<b>2,713</b>
FTE	13.7	12.8	13.5	13.0	12.2
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	176	175	186	181	176
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>176</b>	<b>175</b>	<b>186</b>	<b>181</b>	<b>176</b>
FTE	2.3	2.2	2.3	2.2	2.1
<b>Escalation to 2016\$</b>					
Labor	125	89	65	32	0
Non-Labor	54	26	-6	5	0
NSE	0	0	0	0	0
<b>Total</b>	<b>179</b>	<b>114</b>	<b>58</b>	<b>37</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	1,402	1,315	1,393	1,331	1,243
Non-Labor	1,914	2,095	1,917	2,041	1,646
NSE	0	0	0	0	0
<b>Total</b>	<b>3,316</b>	<b>3,410</b>	<b>3,310</b>	<b>3,373</b>	<b>2,889</b>
FTE	16.0	15.0	15.8	15.2	14.3

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. INVENTORY MANAGEMENT  
 Category-Sub: 1. INVENTORY MANAGEMENT  
 Workpaper: 2SS003.000 - FABRICATION & REPAIR

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
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*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: C. SUPPLIER DIVERSITY  
 Workpaper: 2SS007.000

**Summary for Category: C. SUPPLIER DIVERSITY**

	In 2016\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Labor	285	479	479	479
Non-Labor	402	572	672	672
NSE	0	0	0	0
<b>Total</b>	<b>687</b>	<b>1,051</b>	<b>1,151</b>	<b>1,151</b>
FTE	0.7	4.5	4.5	4.5

**Workpapers belonging to this Category:**

**2SS007.000 SUPPLIER DIVERSITY**

Labor	285	479	479	479
Non-Labor	402	572	672	672
NSE	0	0	0	0
<b>Total</b>	<b>687</b>	<b>1,051</b>	<b>1,151</b>	<b>1,151</b>
FTE	0.7	4.5	4.5	4.5

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2SS007.000 - SUPPLIER DIVERSITY**

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: C. SUPPLIER DIVERSITY  
 Category-Sub: 1. SUPPLIER DIVERSITY  
 Workpaper: 2SS007.000 - SUPPLIER DIVERSITY

**Activity Description:**

This cost center contains all costs directly related to supplier diversity activities for SoCalGas.

**Forecast Explanations:**

**Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**Non-Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**NSE - 5-YR Average**

N/A

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		549	414	435	496	285	479	479	479	
Non-Labor		632	958	613	256	402	573	673	673	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>1,181</b>	<b>1,372</b>	<b>1,048</b>	<b>752</b>	<b>687</b>	<b>1,052</b>	<b>1,152</b>	<b>1,152</b>	
FTE		5.7	4.2	4.1	5.1	0.7	4.4	4.4	4.4	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: C. SUPPLIER DIVERSITY  
 Category-Sub: 1. SUPPLIER DIVERSITY  
 Workpaper: 2SS007.000 - SUPPLIER DIVERSITY

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	5-YR Average	436	436	436	43	43	43	479	479	479
Non-Labor	5-YR Average	572	572	572	0	100	100	572	672	672
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>1,008</b>	<b>1,008</b>	<b>1,008</b>	<b>43</b>	<b>143</b>	<b>143</b>	<b>1,051</b>	<b>1,151</b>	<b>1,151</b>
FTE	5-YR Average	4.0	4.0	4.0	0.5	0.5	0.5	4.5	4.5	4.5

**Forecast Adjustment Details:**

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID	
2017	Other	43	0	0	43	0.5	1-Sided Adj	JPUND20170307170953537	
<b>Explanation:</b>		RESUMPTION OF ROUTINE SUPPLIER DIVERSITY WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2017 Total</b>		<b>43</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>0.5</b>			
2018	Other	43	0	0	43	0.5	1-Sided Adj	JPUND20170307171011277	
<b>Explanation:</b>		RESUMPTION OF ROUTINE SUPPLIER DIVERSITY WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
2018	Other	0	100	0	100	0.0	1-Sided Adj	JPUND20170310131856287	
<b>Explanation:</b>		SUPPLIER DIVERSITY JOINT UTILITY NATIONAL DIVERSITY COALITION							
<b>2018 Total</b>		<b>43</b>	<b>100</b>	<b>0</b>	<b>143</b>	<b>0.5</b>			
2019	Other	43	0	0	43	0.5	1-Sided Adj	JPUND20170307171024383	
<b>Explanation:</b>		RESUMPTION OF ROUTINE SUPPLIER DIVERSITY WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
2019	Other	0	100	0	100	0.0	1-Sided Adj	JPUND20170310131910917	
<b>Explanation:</b>		SUPPLIER DIVERSITY JOINT UTILITY NATIONAL DIVERSITY COALITION							
<b>2019 Total</b>		<b>43</b>	<b>100</b>	<b>0</b>	<b>143</b>	<b>0.5</b>			

Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: C. SUPPLIER DIVERSITY  
Category-Sub: 1. SUPPLIER DIVERSITY  
Workpaper: 2SS007.000 - SUPPLIER DIVERSITY

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	431	331	357	417	315
Non-Labor	614	946	615	255	288
NSE	0	0	0	0	0
<b>Total</b>	<b>1,045</b>	<b>1,277</b>	<b>972</b>	<b>672</b>	<b>603</b>
FTE	4.9	3.6	3.5	4.4	2.9
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	-70
Non-Labor	0	0	0	0	114
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44</b>
FTE	0.0	0.0	0.0	0.0	-2.3
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	431	331	357	417	245
Non-Labor	614	946	615	255	402
NSE	0	0	0	0	0
<b>Total</b>	<b>1,045</b>	<b>1,277</b>	<b>972</b>	<b>672</b>	<b>647</b>
FTE	4.9	3.6	3.5	4.4	0.6
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	69	55	58	67	40
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>69</b>	<b>55</b>	<b>58</b>	<b>67</b>	<b>40</b>
FTE	0.8	0.6	0.6	0.7	0.1
<b>Escalation to 2016\$</b>					
Labor	49	28	20	12	0
Non-Labor	18	12	-2	1	0
NSE	0	0	0	0	0
<b>Total</b>	<b>67</b>	<b>40</b>	<b>18</b>	<b>13</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	549	414	435	496	285
Non-Labor	632	958	613	256	402
NSE	0	0	0	0	0
<b>Total</b>	<b>1,181</b>	<b>1,372</b>	<b>1,048</b>	<b>752</b>	<b>687</b>
FTE	5.7	4.2	4.1	5.1	0.7

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: C. SUPPLIER DIVERSITY  
 Category-Sub: 1. SUPPLIER DIVERSITY  
 Workpaper: 2SS007.000 - SUPPLIER DIVERSITY

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	-0.412	-70
Non-Labor	0	0	0	0	114
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-0.412</b>	<b>44</b>
FTE	0.0	0.0	0.0	0.0	-2.3

**Detail of Adjustments to Recorded:**

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
<b>2012 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2013 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2014 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
2015	Aliso	0	0	0	0.0	1-Sided Adj	JPUND20161121111845703
<b>Explanation:</b> ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.							
<b>2015 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
2016	Aliso	-215	-3	0	-2.3	1-Sided Adj	JPUND20161121111912563
<b>Explanation:</b> ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.							
2016	Other	118	0	0	0.0	CCTR Transf From 2200-2476.000	JPUND20170221145604097
<b>Explanation:</b> SUPPLIER DIVERSITY - LABOR DOLLARS MISALLOCATED IN SAP DUE TO MYTIME COST CENTER ASSIGNMENT ERRORS. BELONGS TO 2200-2352.							
2016	Other	0	117	0	0.0	CCTR Transf From 2200-2476.000	JPUND20170221145903143
<b>Explanation:</b> SUPPLIER DIVERSITY - NONLABOR DOLLARS FOR SUPPLIER DIVERSITY PROGRAM EXPENSES, MISALLOCATED IN SAP DUE TO COST CENTER ASSIGNMENT ERRORS DURING INVOICE PROCESSING. BELONGS TO 2200-2352.							
2016	Other	27	0	0	0.0	CCTR Transf From 2200-2380.000	JPUND20170221145415710
<b>Explanation:</b> SUPPLIER DIVERSITY - LABOR DOLLARS MISALLOCATED IN SAP DUE TO MYTIME COST CENTER ASSIGNMENT ERRORS. BELONGS TO 2200-2352.							

*Note: Totals may include rounding differences.*

Southern California Gas Company  
 2019 GRC - APP  
 Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: C. SUPPLIER DIVERSITY  
 Category-Sub: 1. SUPPLIER DIVERSITY  
 Workpaper: 2SS007.000 - SUPPLIER DIVERSITY

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
<b>2016 Total</b>		<b>-70</b>	<b>114</b>	<b>0</b>	<b>-2.3</b>		

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: D. OFFICE SERVICES  
 Workpaper: 2SS006.000

**Summary for Category: D. OFFICE SERVICES**

	In 2016\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Labor	0	0	0	0
Non-Labor	2,486	2,910	2,910	2,910
NSE	0	0	0	0
<b>Total</b>	<b>2,486</b>	<b>2,910</b>	<b>2,910</b>	<b>2,910</b>
FTE	0.0	0.0	0.0	0.0

**Workpapers belonging to this Category:**

**2SS006.000 OFFICE SERVICES**

Labor	0	0	0	0
Non-Labor	2,486	2,910	2,910	2,910
NSE	0	0	0	0
<b>Total</b>	<b>2,486</b>	<b>2,910</b>	<b>2,910</b>	<b>2,910</b>
FTE	0.0	0.0	0.0	0.0

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2SS006.000 - OFFICE SERVICES**

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: D. OFFICE SERVICES  
 Category-Sub: 1. OFFICE SERVICES  
 Workpaper: 2SS006.000 - OFFICE SERVICES

**Activity Description:**

This cost center provides non-labor services of postage, printshop, mail, courier, travel and records management. Services are used by all SoCalGas employees.

**Forecast Explanations:**

**Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**Non-Labor - 5-YR Average**

The five year average was selected as the baseline methodology. This was selected as the best representation of future cost.

**NSE - 5-YR Average**

N/A

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		0	0	0	0	0	0	0	0	
Non-Labor		3,087	3,117	2,984	2,876	2,486	2,909	2,909	2,909	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>3,087</b>	<b>3,117</b>	<b>2,984</b>	<b>2,876</b>	<b>2,486</b>	<b>2,909</b>	<b>2,909</b>	<b>2,909</b>	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: D. OFFICE SERVICES  
 Category-Sub: 1. OFFICE SERVICES  
 Workpaper: 2SS006.000 - OFFICE SERVICES

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	5-YR Average	0	0	0	0	0	0	0	0	0
Non-Labor	5-YR Average	2,910	2,910	2,910	0	0	0	2,910	2,910	2,910
NSE	5-YR Average	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>2,910</b>	<b>2,910</b>	<b>2,910</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,910</b>	<b>2,910</b>	<b>2,910</b>
FTE	5-YR Average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
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Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby  
Category: D. OFFICE SERVICES  
Category-Sub: 1. OFFICE SERVICES  
Workpaper: 2SS006.000 - OFFICE SERVICES

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	0	0	0	0	0
Non-Labor	2,842	3,069	2,994	2,868	2,486
NSE	0	0	0	0	0
<b>Total</b>	<b>2,842</b>	<b>3,069</b>	<b>2,994</b>	<b>2,868</b>	<b>2,486</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	0
Non-Labor	159	10	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>159</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	0	0	0	0	0
Non-Labor	3,000	3,079	2,994	2,868	2,486
NSE	0	0	0	0	0
<b>Total</b>	<b>3,000</b>	<b>3,079</b>	<b>2,994</b>	<b>2,868</b>	<b>2,486</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Escalation to 2016\$</b>					
Labor	0	0	0	0	0
Non-Labor	87	38	-10	7	0
NSE	0	0	0	0	0
<b>Total</b>	<b>87</b>	<b>38</b>	<b>-10</b>	<b>7</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	0	0	0	0	0
Non-Labor	3,087	3,117	2,984	2,876	2,486
NSE	0	0	0	0	0
<b>Total</b>	<b>3,087</b>	<b>3,117</b>	<b>2,984</b>	<b>2,876</b>	<b>2,486</b>
FTE	0.0	0.0	0.0	0.0	0.0

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: D. OFFICE SERVICES  
 Category-Sub: 1. OFFICE SERVICES  
 Workpaper: 2SS006.000 - OFFICE SERVICES

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	0	0
Non-Labor	159	10	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>159</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0

**Detail of Adjustments to Recorded:**

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
2012	Other	0	159	0	0.0	CCTR Transf From 2100-3267.000	JKLONG20161201123025963
<b>Explanation:</b>		Transfer of historical cost of Office Services activity that was performed on behalf of SCG.					
<b>2012 Total</b>		<b>0</b>	<b>159</b>	<b>0</b>	<b>0.0</b>		
2013	Other	0	224	0	0.0	CCTR Transf From 2100-3018.000	JKLONG20161117112044460
<b>Explanation:</b>		DELETE THIS					
2013	Other	0	10	0	0.0	CCTR Transf From 2100-3267.000	JKLONG20161201123118663
<b>Explanation:</b>		Transfer of historical cost of Office Services activity that was performed on behalf of SCG.					
2013	Other	0	-224	0	0.0	CCTR Transf From 2100-3018.000	JKLONG20161201104825410
<b>Explanation:</b>		DELETE THIS					
<b>2013 Total</b>		<b>0</b>	<b>10</b>	<b>0</b>	<b>0.0</b>		
<b>2014 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2015 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2016 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		

*Note: Totals may include rounding differences.*

Southern California Gas Company  
 2019 GRC - APP  
 Shared Services Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby

**Summary of Shared Services Workpapers:**

Description	In 2016 \$ (000) Incurred Costs			
	Adjusted-Recorded 2016	Adjusted-Forecast		
		2017	2018	2019
A. VP SUPPLY MANAGEMENT & LOGISTICS	328	334	334	334
B. SUPPLY CHAIN POLICY & INTEGRATION	165	186	186	186
<b>Total</b>	<b>493</b>	<b>520</b>	<b>520</b>	<b>520</b>

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Shared Services Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. VP SUPPLY MANAGEMENT & LOGISTICS  
 Cost Center: 2200-2562.000

**Summary for Category: A. VP SUPPLY MANAGEMENT & LOGISTICS**

	In 2016\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Labor	295	301	301	301
Non-Labor	33	33	33	33
NSE	0	0	0	0
<b>Total</b>	<u>328</u>	<u>334</u>	<u>334</u>	<u>334</u>
FTE	1.7	1.8	1.8	1.8

**Cost Centers belonging to this Category:**

**2200-2562.000 VP SUPPLY MANAGEMENT & LOGISTICS**

Labor	295	301	301	301
Non-Labor	33	33	33	33
NSE	0	0	0	0
<b>Total</b>	<u>328</u>	<u>334</u>	<u>334</u>	<u>334</u>
FTE	1.7	1.8	1.8	1.8

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2200-2562.000 - VP SUPPLY MANAGEMENT & LOGISTICS**

Southern California Gas Company  
2019 GRC - APP  
Shared Services Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. VP SUPPLY MANAGEMENT & LOGISTICS  
 Category-Sub: 1. VP SUPPLY MANAGEMENT & LOGISTICS  
 Cost Center: 2200-2562.000 - VP SUPPLY MANAGEMENT & LOGISTICS

**Activity Description:**

Cost center for Vice President of Supply Management & Logistics, administrative associate, project management and associated expenses.

**Forecast Explanations:**

**Labor - Base YR Rec**

Base year was chosen as this is a new cost center within Supply Management with limited history.

**Non-Labor - Base YR Rec**

Base year was chosen as this is a new cost center within Supply Management with limited history.

**NSE - Base YR Rec**

n/a

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		0	0	0	263	295	302	302	302	
Non-Labor		0	0	0	43	33	32	32	32	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>306</b>	<b>328</b>	<b>334</b>	<b>334</b>	<b>334</b>	
FTE		0.0	0.0	0.0	1.2	1.7	1.8	1.8	1.8	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
2019 GRC - APP  
Shared Services Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. VP SUPPLY MANAGEMENT & LOGISTICS  
 Category-Sub: 1. VP SUPPLY MANAGEMENT & LOGISTICS  
 Cost Center: 2200-2562.000 - VP SUPPLY MANAGEMENT & LOGISTICS

**Cost Center Allocations (Incurred Costs):**

	2016 Adjusted-Recorded					2017 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	34	10	0	44	0.5	34	10	0	44	0.5
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	262	22	0	284	1.2	268	22	0	290	1.3
<b>Total Incurred</b>	<b>296</b>	<b>32</b>	<b>0</b>	<b>328</b>	<b>1.7</b>	<b>302</b>	<b>32</b>	<b>0</b>	<b>334</b>	<b>1.8</b>
<b>% Allocation</b>										
Retained	58.00%	58.00%				58.00%	58.00%			
SEU	42.00%	42.00%				42.00%	42.00%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2018 Adjusted-Forecast					2019 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	34	10	0	44	0.5	34	10	0	44	0.5
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	268	22	0	290	1.3	268	22	0	290	1.3
<b>Total Incurred</b>	<b>302</b>	<b>32</b>	<b>0</b>	<b>334</b>	<b>1.8</b>	<b>302</b>	<b>32</b>	<b>0</b>	<b>334</b>	<b>1.8</b>
<b>% Allocation</b>										
Retained	58.00%	58.00%				58.00%	58.00%			
SEU	42.00%	42.00%				42.00%	42.00%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

**Cost Center Allocation Percentage Drivers/Methodology:**

**Cost Center Allocation Percentage for 2016**

VP (and costs associated with/in support of) oversees both SCG and SDGE. Methodology for calculating percentage allocation has been size (headcount) of departments.

**Cost Center Allocation Percentage for 2017**

VP (and costs associated with/in support of) oversees both SCG and SDGE. Methodology for calculating percentage allocation has been size (headcount) of departments.

**Cost Center Allocation Percentage for 2018**

VP (and costs associated with/in support of) oversees both SCG and SDGE. Methodology for calculating percentage allocation has been size (headcount) of departments.

**Cost Center Allocation Percentage for 2019**

VP (and costs associated with/in support of) oversees both SCG and SDGE. Methodology for calculating percentage allocation has been size (headcount) of departments.

Note: Totals may include rounding differences.

Southern California Gas Company  
2019 GRC - APP  
Shared Services Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. VP SUPPLY MANAGEMENT & LOGISTICS  
 Category-Sub: 1. VP SUPPLY MANAGEMENT & LOGISTICS  
 Cost Center: 2200-2562.000 - VP SUPPLY MANAGEMENT & LOGISTICS

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	Base YR Rec	295	295	295	6	6	6	301	301	301
Non-Labor	Base YR Rec	33	33	33	0	0	0	33	33	33
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>328</b>	<b>328</b>	<b>328</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>334</b>	<b>334</b>	<b>334</b>
FTE	Base YR Rec	1.7	1.7	1.7	0.1	0.1	0.1	1.8	1.8	1.8

**Forecast Adjustment Details:**

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID	
2017	Other	6	0	0	6	0.1	1-Sided Adj	JPUND20170307171321370	
<b>Explanation:</b>		RESUMPTION OF ROUTINE WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2017 Total</b>		<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0.1</b>			
2018	Other	6	0	0	6	0.1	1-Sided Adj	JPUND20170307171339040	
<b>Explanation:</b>		RESUMPTION OF ROUTINE WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2018 Total</b>		<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0.1</b>			
2019	Other	6	0	0	6	0.1	1-Sided Adj	JPUND20170307171400730	
<b>Explanation:</b>		RESUMPTION OF ROUTINE WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2019 Total</b>		<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0.1</b>			

Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. VP SUPPLY MANAGEMENT & LOGISTICS  
 Category-Sub: 1. VP SUPPLY MANAGEMENT & LOGISTICS  
 Cost Center: 2200-2562.000 - VP SUPPLY MANAGEMENT & LOGISTICS

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	0	0	0	224	282
Non-Labor	0	0	0	42	35
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>266</b>	<b>318</b>
FTE	0.0	0.0	0.0	1.0	1.9
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	-29
Non-Labor	0	0	0	0	-2
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-31</b>
FTE	0.0	0.0	0.0	0.0	-0.4
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	0	0	0	224	254
Non-Labor	0	0	0	42	33
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>266</b>	<b>287</b>
FTE	0.0	0.0	0.0	1.0	1.5
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	0	0	0	36	42
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>42</b>
FTE	0.0	0.0	0.0	0.2	0.2
<b>Escalation to 2016\$</b>					
Labor	0	0	0	3	0
Non-Labor	0	0	0	1	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	0	0	0	263	295
Non-Labor	0	0	0	43	33
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>306</b>	<b>328</b>
FTE	0.0	0.0	0.0	1.2	1.7

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: A. VP SUPPLY MANAGEMENT & LOGISTICS  
 Category-Sub: 1. VP SUPPLY MANAGEMENT & LOGISTICS  
 Cost Center: 2200-2562.000 - VP SUPPLY MANAGEMENT & LOGISTICS

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	0	-29
Non-Labor	0	0	0	0	-2
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-31</b>
FTE	0.0	0.0	0.0	0.0	-0.4

**Detail of Adjustments to Recorded:**

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
<b>2012 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2013 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2014 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2015 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
2016	Aliso	-29	-2	0	-0.4	1-Sided Adj	JPUND20170223153552950
<b>2016 Total</b>		<b>-29</b>	<b>-2</b>	<b>0</b>	<b>-0.4</b>		

**Explanation:** ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.

*Note: Totals may include rounding differences.*

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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. SUPPLY CHAIN POLICY & INTEGRATION  
 Cost Center: 2200-2573.000

**Summary for Category: B. SUPPLY CHAIN POLICY & INTEGRATION**

	In 2016\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Labor	137	158	158	158
Non-Labor	28	28	28	28
NSE	0	0	0	0
<b>Total</b>	<b>165</b>	<b>186</b>	<b>186</b>	<b>186</b>
FTE	1.7	1.9	1.9	1.9

**Cost Centers belonging to this Category:**

**2200-2573.000 SUPPLY CHAIN POLICY & INTEGRATION**

Labor	137	158	158	158
Non-Labor	28	28	28	28
NSE	0	0	0	0
<b>Total</b>	<b>165</b>	<b>186</b>	<b>186</b>	<b>186</b>
FTE	1.7	1.9	1.9	1.9

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2200-2573.000 - SUPPLY CHAIN POLICY & INTEGRATION**

Southern California Gas Company  
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Shared Services Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. SUPPLY CHAIN POLICY & INTEGRATION  
 Category-Sub: 1. SUPPLY CHAIN POLICY & INTEGRATION  
 Cost Center: 2200-2573.000 - SUPPLY CHAIN POLICY & INTEGRATION

**Activity Description:**

Supply Chain Policy and Integration manages policy & compliance governance, SOX testing, centralized audit coordination/responses, contract management, and supply chain technology functions.

**Forecast Explanations:**

**Labor - Base YR Rec**

Base year was chosen as this is a new cost center within Supply Management with limited history.

**Non-Labor - Base YR Rec**

Base year was chosen as this is a new cost center within Supply Management with limited history.

**NSE - Base YR Rec**

n/a

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		0	0	0	39	137	158	158	158	
Non-Labor		0	0	0	9	28	28	28	28	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>48</b>	<b>165</b>	<b>186</b>	<b>186</b>	<b>186</b>	
FTE		0.0	0.0	0.0	0.2	1.8	1.9	1.9	1.9	

*Note: Totals may include rounding differences.*

Southern California Gas Company  
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Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. SUPPLY CHAIN POLICY & INTEGRATION  
 Category-Sub: 1. SUPPLY CHAIN POLICY & INTEGRATION  
 Cost Center: 2200-2573.000 - SUPPLY CHAIN POLICY & INTEGRATION

**Cost Center Allocations (Incurred Costs):**

	2016 Adjusted-Recorded					2017 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	122	1,383	0	1,505	1.1	143	1,383	0	1,526	1.3
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	15	-1,355	0	-1,340	0.6	15	-1,355	0	-1,340	0.6
<b>Total Incurred</b>	<b>137</b>	<b>28</b>	<b>0</b>	<b>165</b>	<b>1.7</b>	<b>158</b>	<b>28</b>	<b>0</b>	<b>186</b>	<b>1.9</b>
<b>% Allocation</b>										
Retained	47.48%	47.48%				47.48%	47.48%			
SEU	49.22%	49.22%				49.22%	49.22%			
CORP	3.30%	3.30%				3.30%	3.30%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2018 Adjusted-Forecast					2019 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	143	1,383	0	1,526	1.3	143	1,383	0	1,526	1.3
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	15	-1,355	0	-1,340	0.6	15	-1,355	0	-1,340	0.6
<b>Total Incurred</b>	<b>158</b>	<b>28</b>	<b>0</b>	<b>186</b>	<b>1.9</b>	<b>158</b>	<b>28</b>	<b>0</b>	<b>186</b>	<b>1.9</b>
<b>% Allocation</b>										
Retained	47.48%	47.48%				47.48%	47.48%			
SEU	49.22%	49.22%				49.22%	49.22%			
CORP	3.30%	3.30%				3.30%	3.30%			
Unreg	0.00%	0.00%				0.00%	0.00%			

**Cost Center Allocation Percentage Drivers/Methodology:**

**Cost Center Allocation Percentage for 2016**

Methodology is based on the number of contracts written; spend by portfolio group.

**Cost Center Allocation Percentage for 2017**

Methodology is based on the number of contracts written; spend by portfolio group.

**Cost Center Allocation Percentage for 2018**

Methodology is based on the number of contracts written; spend by portfolio group.

**Cost Center Allocation Percentage for 2019**

Methodology is based on the number of contracts written; spend by portfolio group.

Note: Totals may include rounding differences.

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Shared Services Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. SUPPLY CHAIN POLICY & INTEGRATION  
 Category-Sub: 1. SUPPLY CHAIN POLICY & INTEGRATION  
 Cost Center: 2200-2573.000 - SUPPLY CHAIN POLICY & INTEGRATION

**Summary of Adjustments to Forecast:**

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	Base YR Rec	137	137	137	21	21	21	158	158	158
Non-Labor	Base YR Rec	28	28	28	0	0	0	28	28	28
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>165</b>	<b>165</b>	<b>165</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>186</b>	<b>186</b>	<b>186</b>
FTE	Base YR Rec	1.7	1.7	1.7	0.2	0.2	0.2	1.9	1.9	1.9

**Forecast Adjustment Details:**

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID	
2017	Other	21	0	0	21	0.2	1-Sided Adj	JPUND20170307171749823	
<b>Explanation:</b>		RESUMPTION OF ROUTINE ANALYTIC WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2017 Total</b>		<b>21</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0.2</b>			
2018	Other	21	0	0	21	0.2	1-Sided Adj	JPUND20170307171802000	
<b>Explanation:</b>		RESUMPTION OF ROUTINE ANALYTIC WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2018 Total</b>		<b>21</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0.2</b>			
2019	Other	21	0	0	21	0.2	1-Sided Adj	JPUND20170307171814600	
<b>Explanation:</b>		RESUMPTION OF ROUTINE ANALYTIC WORKLOAD FROM TEMPORARY ASSIGNMENT EXCLUDED FROM HISTORICAL COSTS							
<b>2019 Total</b>		<b>21</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0.2</b>			

Note: Totals may include rounding differences.

SCG/SUPPLY MANAGEMENT & SUPPLIER DIVERSITY/Exh No:SCG-22-WP/Witness: D. Willoughby

Southern California Gas Company  
2019 GRC - APP  
Shared Services Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. SUPPLY CHAIN POLICY & INTEGRATION  
 Category-Sub: 1. SUPPLY CHAIN POLICY & INTEGRATION  
 Cost Center: 2200-2573.000 - SUPPLY CHAIN POLICY & INTEGRATION

**Determination of Adjusted-Recorded (Incurred Costs):**

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	0	0	0	37	222
Non-Labor	0	0	0	9	1,410
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>46</b>	<b>1,632</b>
FTE	0.0	0.0	0.0	0.2	2.3
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	-4	-105
Non-Labor	0	0	0	0	-1,382
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-4</b>	<b>-1,486</b>
FTE	0.0	0.0	0.0	0.0	-0.9
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	0	0	0	33	118
Non-Labor	0	0	0	9	28
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>146</b>
FTE	0.0	0.0	0.0	0.2	1.4
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	0	0	0	5	19
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>19</b>
FTE	0.0	0.0	0.0	0.0	0.2
<b>Escalation to 2016\$</b>					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	0	0	0	39	137
Non-Labor	0	0	0	9	28
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>48</b>	<b>165</b>
FTE	0.0	0.0	0.0	0.2	1.6

\* After company-wide exclusions of Non-GRC costs

\*\* Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

Southern California Gas Company  
2019 GRC - APP  
Shared Services Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
 Witness: Denita A. Willoughby  
 Category: B. SUPPLY CHAIN POLICY & INTEGRATION  
 Category-Sub: 1. SUPPLY CHAIN POLICY & INTEGRATION  
 Cost Center: 2200-2573.000 - SUPPLY CHAIN POLICY & INTEGRATION

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	0	-4	-105
Non-Labor	0	0	0	0	-1,382
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-4</b>	<b>-1,486</b>
FTE	0.0	0.0	0.0	0.0	-0.9

**Detail of Adjustments to Recorded:**

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
<b>2012 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2013 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
<b>2014 Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
2015	Aliso	-4	0	0	0.0	1-Sided Adj	JPUND20161121112545157
<b>Explanation:</b>		ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.					
<b>2015 Total</b>		<b>-4</b>	<b>0</b>	<b>0</b>	<b>0.0</b>		
2016	Aliso	-105	-1,382	0	-0.9	1-Sided Adj	JPUND20161121112614220
<b>Explanation:</b>		ALISO CANYON INCIDENT - exclude costs & associated FTEs. 300775156 Wellhead Leak.					
<b>2016 Total</b>		<b>-105</b>	<b>-1,382</b>	<b>0</b>	<b>-0.9</b>		

Note: Totals may include rounding differences.

Southern California Gas Company  
2019 GRC - APP  
Non-Shared Service Workpapers

Area: SUPPLY MANAGEMENT & SUPPLIER DIVERSITY  
Witness: Denita A. Willoughby

**Appendix A: List of Non-Shared Cost Centers**

<b>Cost Center</b>	<b>Sub</b>	<b>Description</b>
2200-0008	000	ADMIN SERVICES
2200-0620	000	GAS PORTFOLIO MANAGER
2200-0621	000	VALENCIA STOREROOM
2200-0622	000	OXNARD STOREROOM
2200-0679	000	SAN DIMAS STOREROOM
2200-0680	000	SAN BERNADINO STOREROOM
2200-0791	000	LOGISTICS NORTH MANAGER
2200-0794	000	MATERIAL DISTRIBUTION
2200-0795	000	MATERIAL SERVICES INVENTORY
2200-0796	000	SOUTH STOREROOM
2200-0797	000	RECEIVING AND SUPPORT
2200-0798	000	METER SHOP & RECORDS
2200-0800	000	FABRICATION & REPAIR
2200-2142	000	SUPPLY MANAGEMENT DIRECTOR
2200-2159	000	DOCUMENT & OFFICE SERVICES - SCG
2200-2301	000	SUPPLY CHAIN PROJECTS
2200-2352	000	SUPPLIER DIVERSITY
2200-2380	000	SUPPORT SERVICES NTH
2200-2437	000	PSEP PORTFOLIO MGMT
2200-2476	000	SUPPLIER EXCELLENCE
2200-2593	000	GAS MATERIALS PORTFOLIO