

Application of SAN DIEGO GAS & ELECTRIC )  
COMPANY for authority to update its gas and )  
electric revenue requirement and base rates )  
effective January 1, 2019 (U 902-M) )

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

Exhibit No.: (SDG&E-02-WP)

WORKPAPERS TO  
PREPARED DIRECT TESTIMONY  
OF GREGORY FLORES  
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

OCTOBER 2017



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

**Exhibit SDG&E-02-WP - RISK MANAGEMENT**

<b>DOCUMENT</b>	<b>PAGE</b>
<b>Overall Summary For Exhibit No. SDG&amp;E-02-WP</b>	<b>1</b>
<b><i>Summary of Shared Services Workpapers</i></b>	<b>2</b>
Category: A. VP AGRM	3
..2100-3934.000 - VP ENTERPRISE RISK MANAGEMENT	4
Category: B. Risk Management	10
..2100-3590.000 - RISK MANAGEMENT	11
..2100-3945.000 - OPERATIONS RISK MANAGEMENT SDG&E	17

**Overall Summary For Exhibit No. SDG&E-02-WP**

**Area: RISK MANAGEMENT**  
**Witness: Gregory Flores**

Description	In 2016 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
<i>Non-Shared Services</i>	0	0	0	0
<i>Shared Services</i>	4,281	4,943	5,843	6,743
<b>Total</b>	<b>4,281</b>	<b>4,943</b>	<b>5,843</b>	<b>6,743</b>

*Note: Totals may include rounding differences.*

San Diego Gas & Electric Company  
 2019 GRC - APP Shared  
 Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores

**Summary of Shared Services Workpapers:**

Description	In 2016 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
A. VP AGRM	398	431	431	431
B. Risk Management	3,883	4,512	5,412	6,312
<b>Total</b>	<b>4,281</b>	<b>4,943</b>	<b>5,843</b>	<b>6,743</b>

*Note: Totals may include rounding differences.*

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
Witness: Gregory Flores  
Category: A. VP AGRM  
Cost Center: 2100-3934.000

**Summary for Category: A. VP AGRM**

	<b>In 2016\$ (000) Incurred Costs</b>			
	<b>Adjusted-Recorded</b>	<b>Adjusted-Forecast</b>		
	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Labor	370	342	342	342
Non-Labor	28	89	89	89
NSE	0	0	0	0
<b>Total</b>	<b>398</b>	<b>431</b>	<b>431</b>	<b>431</b>
FTE	1.6	1.6	1.6	1.6

**Cost Centers belonging to this Category:**

**2100-3934.000 VP ENTERPRISE RISK MANAGEMENT**

Labor	370	342	342	342
Non-Labor	28	89	89	89
NSE	0	0	0	0
<b>Total</b>	<b>398</b>	<b>431</b>	<b>431</b>	<b>431</b>
FTE	1.6	1.6	1.6	1.6

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2100-3934.000 - VP ENTERPRISE RISK MANAGEMENT**

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores  
 Category: A. VP AGRM  
 Category-Sub: 1. Enterprise Risk Management & Compliance  
 Cost Center: 2100-3934.000 - VP ENTERPRISE RISK MANAGEMENT

**Activity Description:**

**Forecast Explanations:**

Labor - 3-YR Average

Non-Labor - 3-YR Average

NSE - 3-YR Average

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		0	0	207	449	370	342	342	342	
Non-Labor		0	0	211	28	28	89	89	89	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>0</b>	<b>0</b>	<b>418</b>	<b>478</b>	<b>398</b>	<b>431</b>	<b>431</b>	<b>431</b>	
FTE		0.0	0.0	1.0	2.1	1.7	1.6	1.6	1.6	

*Note: Totals may include rounding differences.*

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: Witness: RISK MANAGEMENT  
 Category: Gregory Flores  
 Category-Sub: A. VP AGRM  
 Cost Center: 1. Enterprise Risk Management & Compliance  
 2100-3934.000 - VP ENTERPRISE RISK MANAGEMENT

**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	0	1	0	1	0.0	2	1	0	3	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	370	27	0	397	1.6	340	88	0	428	1.6
<b>Total Incurred</b>	<b>370</b>	<b>28</b>	<b>0</b>	<b>398</b>	<b>1.6</b>	<b>342</b>	<b>89</b>	<b>0</b>	<b>431</b>	<b>1.6</b>
<b>% Allocation</b>										
Retained	50.00%	50.00%				50.00%	50.00%			
SEU	50.00%	50.00%				50.00%	50.00%			
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	2	1	0	3	0.0	2	1	0	3	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	340	88	0	428	1.6	340	88	0	428	1.6
<b>Total Incurred</b>	<b>342</b>	<b>89</b>	<b>0</b>	<b>431</b>	<b>1.6</b>	<b>342</b>	<b>89</b>	<b>0</b>	<b>431</b>	<b>1.6</b>
<b>% Allocation</b>										
Retained	50.00%	50.00%				50.00%	50.00%			
SEU	50.00%	50.00%				50.00%	50.00%			
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**

Services are shared between SDG&E and SCG.

**Cost Center Allocation Percentage for 2017**

Services are shared between SDG&E and SCG.

**Cost Center Allocation Percentage for 2018**

Services are shared between SDG&E and SCG.

**Cost Center Allocation Percentage for 2019**

Services are shared between SDG&E and SCG.

Note: Totals may include rounding differences.



San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores  
 Category: A. VP AGRM  
 Category-Sub: 1. Enterprise Risk Management & Compliance  
 Cost Center: 2100-3934.000 - VP ENTERPRISE RISK MANAGEMENT

**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	3-YR Average	342	342	342	0	0	0	342	342	342
Non-Labor	3-YR Average	89	89	89	0	0	0	89	89	89
NSE	3-YR Average	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>431</b>	<b>431</b>	<b>431</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>431</b>	<b>431</b>	<b>431</b>
FTE	3-YR Average	1.6	1.6	1.6	0.0	0.0	0.0	1.6	1.6	1.6

<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>
-------------	------------------	--------------	-------------	------------	--------------	------------	-----------------	--------------

Note: Totals may include rounding differences.

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
Witness: Gregory Flores  
Category: A. VP AGRM  
Category-Sub: 1. Enterprise Risk Management & Compliance  
Cost Center: 2100-3934.000 - VP ENTERPRISE RISK MANAGEMENT

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

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	0	0	173	383	317
Non-Labor	0	0	204	28	28
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>376</b>	<b>411</b>	<b>345</b>
FTE	0.0	0.0	0.8	1.8	1.4
<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	0	0	173	383	317
Non-Labor	0	0	204	28	28
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>376</b>	<b>411</b>	<b>345</b>
FTE	0.0	0.0	0.8	1.8	1.4
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	0	0	28	59	53
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>59</b>	<b>53</b>
FTE	0.0	0.0	0.2	0.3	0.3
<b>Escalation to 2016\$</b>					
Labor	0	0	7	7	0
Non-Labor	0	0	7	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>8</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	0	0	207	449	370
Non-Labor	0	0	211	28	28
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>418</b>	<b>478</b>	<b>398</b>
FTE	0.0	0.0	1.0	2.1	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.

San Diego Gas & Electric Company  
 2019 GRC - APP Shared  
 Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores  
 Category: A. VP AGRM  
 Category-Sub: 1. Enterprise Risk Management & Compliance  
 Cost Center: 2100-3934.000 - VP ENTERPRISE RISK MANAGEMENT

**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

Year	<u>Adj_Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj_Type</u>	<u>RefID</u>
------	------------------	--------------	-------------	------------	------------	-----------------	--------------

*Note: Totals may include rounding differences.*

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
Witness: Gregory Flores  
Category: B. Risk Management  
Cost Center: VARIOUS

**Summary for Category: B. Risk Management**

	In 2016\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Labor	1,427	1,701	1,940	2,177
Non-Labor	2,456	2,810	3,472	4,135
NSE	0	0	0	0
<b>Total</b>	<b>3,883</b>	<b>4,511</b>	<b>5,412</b>	<b>6,312</b>
FTE	11.3	12.6	14.4	16.2

**Cost Centers belonging to this Category:**

**2100-3590.000 Risk Management**

Labor	869	906	985	1,063
Non-Labor	1,787	1,924	2,360	2,797
NSE	0	0	0	0
<b>Total</b>	<b>2,656</b>	<b>2,830</b>	<b>3,345</b>	<b>3,860</b>
FTE	7.0	7.3	7.8	8.4

**2100-3945.000 OPERATIONS RISK MANAGEMENT SDG&E**

Labor	558	795	955	1,114
Non-Labor	669	886	1,112	1,338
NSE	0	0	0	0
<b>Total</b>	<b>1,227</b>	<b>1,681</b>	<b>2,067</b>	<b>2,452</b>
FTE	4.3	5.3	6.6	7.8

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2100-3590.000 - Risk Management**

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores  
 Category: B. Risk Management  
 Category-Sub: 1. Enterprise Risk Management  
 Cost Center: 2100-3590.000 - Risk Management

**Activity Description:**

**Forecast Explanations:**

Labor - 5-YR Linear

Non-Labor - 5-YR Linear

NSE - 5-YR Linear

**Summary of Results:**

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		568	580	568	765	869	905	985	1,064	
Non-Labor		95	83	44	1,063	1,787	1,924	2,361	2,797	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>663</b>	<b>663</b>	<b>612</b>	<b>1,828</b>	<b>2,656</b>	<b>2,829</b>	<b>3,346</b>	<b>3,861</b>	
FTE		4.9	4.9	5.1	6.2	7.0	7.3	7.8	8.4	

*Note: Totals may include rounding differences.*

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: Witness: RISK MANAGEMENT  
 Category: Gregory Flores  
 Category-Sub: B. Risk Management  
 Cost Center: 1. Enterprise Risk Management  
 2100-3590.000 - Risk Management

**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	1	2	0	3	0.0	-1	1	0	0	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	868	1,785	0	2,653	7.0	906	1,923	0	2,829	7.3
<b>Total Incurred</b>	<b>869</b>	<b>1,787</b>	<b>0</b>	<b>2,656</b>	<b>7.0</b>	<b>905</b>	<b>1,924</b>	<b>0</b>	<b>2,829</b>	<b>7.3</b>
<b>% Allocation</b>										
Retained	60.91%	60.91%				60.91%	60.91%			
SEU	39.09%	39.09%				39.09%	39.09%			
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	-1	2	0	1	0.0	-2	2	0	0	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	986	2,359	0	3,345	7.8	1,066	2,795	0	3,861	8.4
<b>Total Incurred</b>	<b>985</b>	<b>2,361</b>	<b>0</b>	<b>3,346</b>	<b>7.8</b>	<b>1,064</b>	<b>2,797</b>	<b>0</b>	<b>3,861</b>	<b>8.4</b>
<b>% Allocation</b>										
Retained	60.91%	60.91%				60.91%	60.91%			
SEU	39.09%	39.09%				39.09%	39.09%			
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**

Risk Management supports SDG&E and SCG.

**Cost Center Allocation Percentage for 2017**

Risk Management supports SDG&E and SCG.

**Cost Center Allocation Percentage for 2018**

Risk Management supports SDG&E and SCG.

**Cost Center Allocation Percentage for 2019**

Risk Management supports SDG&E and SCG.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores  
 Category: B. Risk Management  
 Category-Sub: 1. Enterprise Risk Management  
 Cost Center: 2100-3590.000 - Risk Management

**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 Linear	906	985	1,063	0	0	0	906	985	1,063
Non-Labor	5-YR Linear	1,924	2,360	2,797	0	0	0	1,924	2,360	2,797
NSE	5-YR Linear	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>2,830</b>	<b>3,345</b>	<b>3,860</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,830</b>	<b>3,345</b>	<b>3,860</b>
FTE	5-YR Linear	7.3	7.8	8.4	0.0	0.0	0.0	7.3	7.8	8.4

<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>
-------------	------------------	--------------	-------------	------------	--------------	------------	-----------------	--------------

Note: Totals may include rounding differences.



San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
Witness: Gregory Flores  
Category: B. Risk Management  
Category-Sub: 1. Enterprise Risk Management  
Cost Center: 2100-3590.000 - Risk Management

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

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	464	476	474	652	745
Non-Labor	88	79	43	1,046	1,787
NSE	0	0	0	0	0
<b>Total</b>	<b>552</b>	<b>555</b>	<b>517</b>	<b>1,698</b>	<b>2,532</b>
FTE	4.2	4.2	4.3	5.3	5.9
<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	464	476	474	652	745
Non-Labor	88	79	43	1,046	1,787
NSE	0	0	0	0	0
<b>Total</b>	<b>552</b>	<b>555</b>	<b>517</b>	<b>1,698</b>	<b>2,532</b>
FTE	4.2	4.2	4.3	5.3	5.9
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	67	75	76	101	124
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
<b>Total</b>	<b>67</b>	<b>75</b>	<b>76</b>	<b>101</b>	<b>124</b>
FTE	0.7	0.7	0.8	0.9	1.1
<b>Escalation to 2016\$</b>					
Labor	38	29	19	12	0
Non-Labor	6	4	1	17	0
NSE	0	0	0	0	0
<b>Total</b>	<b>44</b>	<b>33</b>	<b>20</b>	<b>30</b>	<b>0</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Constant 2016\$)</b>					
Labor	568	580	568	765	869
Non-Labor	95	83	44	1,063	1,787
NSE	0	0	0	0	0
<b>Total</b>	<b>663</b>	<b>663</b>	<b>612</b>	<b>1,828</b>	<b>2,656</b>
FTE	4.9	4.9	5.1	6.2	7.0

\* 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.

San Diego Gas & Electric Company  
 2019 GRC - APP Shared  
 Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores  
 Category: B. Risk Management  
 Category-Sub: 1. Enterprise Risk Management  
 Cost Center: 2100-3590.000 - Risk Management

**Summary of Adjustments to Recorded:**

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

Year	<u>Adj_Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj_Type</u>	<u>RefID</u>
------	------------------	--------------	-------------	------------	------------	-----------------	--------------

*Note: Totals may include rounding differences.*

**Beginning of Workpaper**  
**2100-3945.000 - OPERATIONS RISK MANAGEMENT SDG&E**

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores  
 Category: B. Risk Management  
 Category-Sub: 2. Operations Risk Management SDG&E  
 Cost Center: 2100-3945.000 - OPERATIONS RISK MANAGEMENT SDG&E

**Activity Description:**

**Forecast Explanations:**

Labor - 5-YR Linear

Non-Labor - 5-YR Linear

NSE - 5-YR Linear

**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	477	558	795	955	1,114	
Non-Labor		0	0	0	922	669	886	1,112	1,339	
NSE		0	0	0	0	0	0	0	0	
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>1,400</b>	<b>1,227</b>	<b>1,681</b>	<b>2,067</b>	<b>2,453</b>	
FTE		0.0	0.0	0.0	3.8	4.3	5.3	6.6	7.8	

*Note: Totals may include rounding differences.*

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: Witness: RISK MANAGEMENT  
 Category: Gregory Flores  
 Category-Sub: B. Risk Management  
 Cost Center: 2. Operations Risk Management SDG&E  
 2100-3945.000 - OPERATIONS RISK MANAGEMENT SDG&E

**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	0	3	0	3	0.0	0	3	0	3	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	558	666	0	1,224	4.3	795	883	0	1,678	5.3
<b>Total Incurred</b>	<b>558</b>	<b>669</b>	<b>0</b>	<b>1,227</b>	<b>4.3</b>	<b>795</b>	<b>886</b>	<b>0</b>	<b>1,681</b>	<b>5.3</b>
<b>% Allocation</b>										
Retained	50.00%	50.00%				50.00%	50.00%			
SEU	50.00%	50.00%				50.00%	50.00%			
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	0	3	0	3	0.0	0	5	0	5	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	955	1,109	0	2,064	6.6	1,114	1,334	0	2,448	7.8
<b>Total Incurred</b>	<b>955</b>	<b>1,112</b>	<b>0</b>	<b>2,067</b>	<b>6.6</b>	<b>1,114</b>	<b>1,339</b>	<b>0</b>	<b>2,453</b>	<b>7.8</b>
<b>% Allocation</b>										
Retained	50.00%	50.00%				50.00%	50.00%			
SEU	50.00%	50.00%				50.00%	50.00%			
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**

Operations Risk Management supports SDG&E and SCG.

**Cost Center Allocation Percentage for 2017**

Operations Risk Management supports SDG&E and SCG.

**Cost Center Allocation Percentage for 2018**

Operations Risk Management supports SDG&E and SCG.

**Cost Center Allocation Percentage for 2019**

Operations Risk Management supports SDG&E and SCG.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores  
 Category: B. Risk Management  
 Category-Sub: 2. Operations Risk Management SDG&E  
 Cost Center: 2100-3945.000 - OPERATIONS RISK MANAGEMENT SDG&E

**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 Linear	685	845	1,004	110	110	110	795	955	1,114
Non-Labor	5-YR Linear	996	1,222	1,448	-110	-110	-110	886	1,112	1,338
NSE	5-YR Linear	0	0	0	0	0	0	0	0	0
<b>Total</b>		<b>1,682</b>	<b>2,067</b>	<b>2,452</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,682</b>	<b>2,067</b>	<b>2,452</b>
FTE	5-YR Linear	5.3	6.6	7.8	0.0	0.0	0.0	5.3	6.6	7.8

**Forecast Adjustment Details:**

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID	
2017	Other	110	0	0	110	0.0	1-Sided Adj	PPSTADLE20161205164059943	
<b>Explanation:</b>		Salary of new employee							
2017	Other	0	-110	0	-110	0.0	1-Sided Adj	PPSTADLE20161205164158603	
<b>Explanation:</b>		Decrease in consulting costs due ot hiring new employee							
<b>2017 Total</b>		<b>110</b>	<b>-110</b>	<b>0</b>	<b>0</b>	<b>0.0</b>			
2018	Other	0	-110	0	-110	0.0	1-Sided Adj	PPSTADLE20161205164453667	
<b>Explanation:</b>		Decrease in consulting due to new employee							
2018	Other	110	0	0	110	0.0	1-Sided Adj	PPSTADLE20161205164355540	
<b>Explanation:</b>		Additional Employee							
<b>2018 Total</b>		<b>110</b>	<b>-110</b>	<b>0</b>	<b>0</b>	<b>0.0</b>			
2019	Other	110	0	0	110	0.0	1-Sided Adj	PPSTADLE20161205164516527	
<b>Explanation:</b>		New employee							
2019	Other	0	-110	0	-110	0.0	1-Sided Adj	PPSTADLE20161205164552383	
<b>Explanation:</b>		Decrease in consulting due to new employee hire							
<b>2019 Total</b>		<b>110</b>	<b>-110</b>	<b>0</b>	<b>0</b>	<b>0.0</b>			

Note: Totals may include rounding differences.

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
Witness: Gregory Flores  
Category: B. Risk Management  
Category-Sub: 2. Operations Risk Management SDG&E  
Cost Center: 2100-3945.000 - OPERATIONS RISK MANAGEMENT SDG&E

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

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
<b>Recorded (Nominal \$)*</b>					
Labor	0	0	0	407	479
Non-Labor	0	0	0	907	670
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,314</b>	<b>1,149</b>
FTE	0.0	0.0	0.0	3.2	3.6
<b>Adjustments (Nominal \$) **</b>					
Labor	0	0	0	0	0
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>-1</b>
FTE	0.0	0.0	0.0	0.0	0.0
<b>Recorded-Adjusted (Nominal \$)</b>					
Labor	0	0	0	407	479
Non-Labor	0	0	0	907	669
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,314</b>	<b>1,148</b>
FTE	0.0	0.0	0.0	3.2	3.6
<b>Vacation &amp; Sick (Nominal \$)</b>					
Labor	0	0	0	63	79
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>63</b>	<b>79</b>
FTE	0.0	0.0	0.0	0.6	0.7
<b>Escalation to 2016\$</b>					
Labor	0	0	0	8	0
Non-Labor	0	0	0	15	0
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</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	477	558
Non-Labor	0	0	0	922	669
NSE	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,400</b>	<b>1,227</b>
FTE	0.0	0.0	0.0	3.8	4.3

\* 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.

San Diego Gas & Electric Company  
2019 GRC - APP Shared  
Services Workpapers

Area: RISK MANAGEMENT  
 Witness: Gregory Flores  
 Category: B. Risk Management  
 Category-Sub: 2. Operations Risk Management SDG&E  
 Cost Center: 2100-3945.000 - OPERATIONS RISK MANAGEMENT SDG&E

**Summary of Adjustments to Recorded:**

In Nominal \$ (000) Incurred Costs						
Years	2012	2013	2014	2015	2016	
Labor	0	0	0	0	0	0
Non-Labor	0	0	0	0	0	-1
NSE	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>-1</b>
FTE	0.0	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
<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	0	-1	0	0.0	1-Sided Adj	PPSTADLE20170508104211893
<b>2016 Total</b>		<b>0</b>	<b>-1</b>	<b>0</b>	<b>0.0</b>		

**Explanation:** This is an adjustment related to Aliso. Order: 7081920. Adjustment type: One sided

*Note: Totals may include rounding differences.*