

Application of SAN DIEGO GAS & ELECTRIC)
COMPANY for authority to update its gas and)
electric revenue requirement and base rates)
effective January 1, 2016 (U 902-M))

Application No. 14-11-____
Exhibit No.: (SDG&E-18-WP)

WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF RICHARD S. PEARSON
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

NOVEMBER 2014



**2016 General Rate Case - APP
INDEX OF WORKPAPERS**

Exhibit SDG&E-18-WP - ENVIRONMENTAL

DOCUMENT	PAGE
Overall Summary For Exhibit No. SDG&E-18-WP	1
<i>Summary of Non-Shared Services Workpapers</i>	2
Category: A. Environmental Compliance	3
..1EV000.000 - ENVIRONMENTAL SDGE NSS COST CENTER	4
Category: B. New Environmental Reg Balancing Acct (NERBA)	25
..1EV000.001 - RNERBA - ENVIRONMENTAL FEES - ELECTRIC REFUNDABLE	26
..1EV000.002 - RNERBA - ENVIRONMENTAL FEES - GAS REFUNDABLE	38
<i>Summary of Shared Services Workpapers</i>	49
Category: A. Hazardous Materials & Waste Management	50
..2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT	51
Category: B. Environmental Lab & Site Assessment	63
..2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS	64
Category: C. Environmental Programs	80
..2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE	81
Category: D. Policy, Oversight & Compliance Management	107
..2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER	108
..2100-3588.000 - VP OPERATIONS SUPPORT	117
..2100-3589.000 - ENVIRONMENTAL SERVICES DIRECTOR	124
<i>Appendix A: List of Non-Shared Cost Centers</i>	132

Overall Summary For Exhibit No. SDG&E-18-WP

Area:	ENVIRONMENTAL
Witness:	Richard S. Pearson

Description	In 2013 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Non-Shared Services	4,167	4,402	4,552	4,658
Shared Services	4,189	4,469	4,549	4,615
Total	8,356	8,871	9,101	9,273

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
 2016 GRC - APP
 Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson

Summary of Non-Shared Services Workpapers:

Description	In 2013 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
A. Environmental Compliance	3,381	3,545	3,634	3,649
B. New Environmental Reg Balancing Acct (NERBA)	786	857	918	1,009
Total	4,167	4,402	4,552	4,658

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: A. Environmental Compliance
Workpaper: 1EV000.000

Summary for Category: A. Environmental Compliance

	In 2013\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	1,728	1,890	1,890	1,890
Non-Labor	1,654	1,656	1,745	1,760
NSE	0	0	0	0
Total	3,382	3,546	3,635	3,650
FTE	20.2	22.6	22.6	22.6

Workpapers belonging to this Category:

1EV000.000 ENVIRONMENTAL SDGE NSS Cost Center

Labor	1,728	1,890	1,890	1,890
Non-Labor	1,654	1,656	1,745	1,760
NSE	0	0	0	0
Total	3,382	3,546	3,635	3,650
FTE	20.2	22.6	22.6	22.6

Note: Totals may include rounding differences.

Beginning of Workpaper
1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: A. Environmental Compliance
Category-Sub: 1. Environmental Compliance
Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

Activity Description:

The compliance activities in this cost category include: management of hazardous waste and treatment storage and disposal facility (TSDF) operations; oversight of daily environmental compliance activities and permits; and support for compliance with all operations and maintenance activities relating to the Sunrise Powerlink and its associated facilities to ensure compliance with all of the environmental permitting for that project.

Forecast Explanations:

Labor - Base YR Rec

A base year forecasting methodology plus incremental upward and downward pressures was used to forecast labor and non-labor costs for Environmental Services. This method, which was used in SDG&E's 2012 GRC and is again most appropriate in this 2016 GRC, identifies specific new environmental regulatory and program-related requirements and costs impacting the company during the GRC period which are incremental to historically incurred costs. Traditional averaging or trending based on historically recorded costs would fail to capture these incremental costs forecasted for TY 2016. Starting with base year represents a conservative base upon which to apply forecasted incremental cost pressures described below, and captures the cost efficiencies implemented in 2013 such as reduction in administrative expenses and strategic contracting efficiencies.

Non-Labor - Base YR Rec

A base year forecasting methodology plus incremental upward and downward pressures was used to forecast labor and non-labor costs for Environmental Services. This method, which was used in SDG&E's 2012 GRC and is again most appropriate in this 2016 GRC, identifies specific new environmental regulatory and program-related requirements and costs impacting the company during the GRC period which are incremental to historically incurred costs. Traditional averaging or trending based on historically recorded costs would fail to capture these incremental costs forecasted for TY 2016. Starting with base year represents a conservative base upon which to apply forecasted incremental cost pressures described below, and captures the cost efficiencies implemented in 2013 such as reduction in administrative expenses and strategic contracting efficiencies.

NSE - Base YR Rec

A base year forecasting methodology plus incremental upward and downward pressures was used to forecast labor and non-labor costs for Environmental Services. This method, which was used in SDG&E's 2012 GRC and is again most appropriate in this 2016 GRC, it identifies specific new environmental regulatory and program-related requirements and costs impacting the company during the GRC period which are incremental to historically incurred costs. Traditional averaging or trending based on historically recorded costs would fail to capture these incremental costs forecasted for TY 2016. Starting with base year represents a conservative base upon which to apply forecasted incremental cost pressures described below, and captures the cost efficiencies implemented in 2013 such as reduction in administrative expenses and strategic contracting efficiencies. Note that there were no NSE adjustments for cost center 1EV000.000.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Environmental Compliance
 Category-Sub: 1. Environmental Compliance
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2009	2010	2011	2012	2013	2014	2015	2016	
Labor		1,794	1,686	1,658	1,637	1,728	1,890	1,890	1,890	
Non-Labor		2,063	1,469	1,445	1,845	1,654	1,656	1,745	1,760	
NSE		0	0	0	0	0	0	0	0	
Total		3,857	3,154	3,104	3,482	3,381	3,545	3,634	3,649	
FTE		20.4	19.7	20.2	19.3	20.2	22.6	22.6	22.6	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Environmental Compliance
 Category-Sub: 1. Environmental Compliance
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	1,728	1,728	1,728	162	162	162	1,890	1,890	1,890
Non-Labor	Base YR Rec	1,654	1,654	1,654	2	91	106	1,656	1,745	1,760
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		3,381	3,381	3,381	164	253	268	3,545	3,634	3,649
FTE	Base YR Rec	20.2	20.2	20.2	2.4	2.4	2.4	22.6	22.6	22.6

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2014	162	0	0	162	2.4	1-Sided Adj
Labor adjustment for full-year funding.						
2014	0	2	0	2	0.0	1-Sided Adj

Water Agency Fee Increases: The California State Water Resources Control Board has a fee schedule for the initial (i.e., application) and annual fees for the permits and water quality certifications that are issued by the State Water Resources Control Board and the Regional Water Quality Control Boards. These fees are reviewed on an annual basis. A revised fee schedule is normally adopted each September, effective from the previous July 1 to the following June 30. Fee incremental increases are based on historic fee increases. See Supplemental Workpaper.

2014 Total	162	2	0	164	2.4	
-------------------	------------	----------	----------	------------	------------	--

2015	0	87	0	87	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Bureau of Land Management Pesticide Use Permit: The Bureau of Land Management requires SDG&E to obtain a Pesticide Use Permit in order to apply herbicides around the bases of the electric distribution poles located on Bureau of Land Management lands. The Pesticide Use Permit requires that the applicant prepare and submit an Environmental Assessment to assist Bureau of Land Management staff to adequately analyze site-specific impacts associated with the use of herbicides and tier to the Programmatic Vegetation Treatment using Herbicides on Bureau of Land Management Lands in 17 Western States/ Record of Decision (Programmatic Env Impact Statement)(2007). See Supplemental Workpapers.

2015	0	4	0	4	0.0	1-Sided Adj
------	---	---	---	---	-----	-------------

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Environmental Compliance
 Category-Sub: 1. Environmental Compliance
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
-------------------	--------------	-------------	------------	--------------	------------	-----------------

Water Agency Fee Increases: The California State Water Resources Control Board has a fee schedule for the initial (i.e., application) and annual fees for the permits and water quality certifications that are issued by the State Water Resources Control Board and the Regional Water Quality Control Boards. These fees are reviewed on an annual basis. A revised fee schedule is normally adopted each September, effective from the previous July 1 to the following June 30. Fee incremental increases are based on historic fee increases. See Supplemental Workpaper.

2015	162	0	0	162	2.4	1-Sided Adj
------	-----	---	---	-----	-----	-------------

Labor adjustment for full-year funding.

2015 Total	162	91	0	253	2.4	
-------------------	------------	-----------	----------	------------	------------	--

2016	0	99	0	99	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Bureau of Land Management Pesticide Use Permit: The Bureau of Land Management requires SDG&E to obtain a Pesticide Use Permit in order to apply herbicides around the bases of the electric distribution poles located on Bureau of Land Management lands. The Pesticide Use Permit requires that the applicant prepare and submit an Environmental Assessment to assist Bureau of Land Management staff to adequately analyze site-specific impacts associated with the use of herbicides and tier to the Programmatic Vegetation Treatment using Herbicides on Bureau of Land Management Lands in 17 Western States/ Record of Decision (Programmatic Env Impact Statement)(2007). See Supplemental Workpapers.

2016	0	7	0	7	0.0	1-Sided Adj
------	---	---	---	---	-----	-------------

Water Agency Fee Increases: The California State Water Resources Control Board has a fee schedule for the initial (i.e., application) and annual fees for the permits and water quality certifications that are issued by the State Water Resources Control Board and the Regional Water Quality Control Boards. These fees are reviewed on an annual basis. A revised fee schedule is normally adopted each September, effective from the previous July 1 to the following June 30. Fee incremental increases are based on historic fee increases. See Supplemental Workpaper.

2016	162	0	0	162	2.4	1-Sided Adj
------	-----	---	---	-----	-----	-------------

Labor adjustment for full-year funding.

2016 Total	162	106	0	268	2.4	
-------------------	------------	------------	----------	------------	------------	--

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: A. Environmental Compliance
Category-Sub: 1. Environmental Compliance
Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	1,870	1,806	1,418	1,400	1,483
Non-Labor	1,882	1,371	1,392	1,816	1,654
NSE	0	0	0	0	0
Total	3,752	3,177	2,810	3,216	3,137
FTE	22.3	21.5	17.7	16.6	17.0
Adjustments (Nominal \$) **					
Labor	-439	-439	-30	0	8
Non-Labor	-15	-12	-1	0	0
NSE	0	0	0	0	0
Total	-454	-450	-30	0	8
FTE	-4.8	-4.7	-0.4	0.0	0.2
Recorded-Adjusted (Nominal \$)					
Labor	1,431	1,368	1,389	1,400	1,491
Non-Labor	1,866	1,359	1,391	1,816	1,654
NSE	0	0	0	0	0
Total	3,297	2,727	2,780	3,216	3,145
FTE	17.5	16.8	17.3	16.6	17.2
Vacation & Sick (Nominal \$)					
Labor	221	218	205	203	237
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	221	218	205	203	237
FTE	2.9	2.9	2.8	2.7	3.0
Escalation to 2013\$					
Labor	142	100	65	35	0
Non-Labor	196	110	54	29	0
NSE	0	0	0	0	0
Total	338	210	119	63	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	1,794	1,686	1,658	1,637	1,728
Non-Labor	2,063	1,469	1,445	1,845	1,654
NSE	0	0	0	0	0
Total	3,857	3,154	3,104	3,482	3,381
FTE	20.4	19.7	20.1	19.3	20.2

* 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.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Environmental Compliance
 Category-Sub: 1. Environmental Compliance
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	-439	-439	-30	0	8
Non-Labor	-15	-12	-0.815	0	0
NSE	0	0	0	0	0
Total	-454	-450	-30	0	8
FTE	-4.8	-4.7	-0.4	0.0	0.2

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009	-75	-3	0	-0.8	CCTR Transf	To 2200-2443.000	MHARPER20131 114120458320

In early 2011 six employees in cost center 2100-3035 Site Assessment supporting SCG were formally transferred from SDGE to SCG. The table displays the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees.

2009	-46	-3	0	-0.8	CCTR Transf	To 2200-2012.000	MHARPER20131 114120754237
------	-----	----	---	------	-------------	------------------	------------------------------

In early 2011 six employees in cost center 2100-3035 Site Assessment supporting SCG were formally transferred from SDGE to SCG. The table displays the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees.

2009	-318	-10	0	-3.2	CCTR Transf	To 2200-2370.000	MHARPER20131 118103440120
------	------	-----	---	------	-------------	------------------	------------------------------

In early 2011 six employees in cost center 2100-3035 Site Assessment supporting SCG were formally transferred from SDGE to SCG. The table displays the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees.

2009 Total	-439	-15	0	-4.8			
-------------------	-------------	------------	----------	-------------	--	--	--

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Environmental Compliance
 Category-Sub: 1. Environmental Compliance
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From Cctr</u>	<u>RefID</u>
2010	-317	-7	0	-3.1	CCTR Transf	To 2200-2370.000	MHARPER20131 114121001513
<p>In early 2011 six employees in cost center 2100-3035 Site Assessment supporting SCG were formally transferred from SDGE to SCG. The table displays the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees.</p>							
2010	-75	-2	0	-0.8	CCTR Transf	To 2200-2443.000	MHARPER20131 114121130260
<p>In early 2011 six employees in cost center 2100-3035 Site Assessment supporting SCG were formally transferred from SDGE to SCG. The table displays the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees.</p>							
2010	-47	-2	0	-0.8	CCTR Transf	To 2200-2012.000	MHARPER20131 114121253900
<p>In early 2011 six employees in cost center 2100-3035 Site Assessment supporting SCG were formally transferred from SDGE to SCG. The table displays the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees.</p>							
2010 Total	-439	-12	0	-4.7			

2011	-22	-0.533	0	-0.2	CCTR Transf	To 2200-2370.000	MHARPER20131 114121426423
<p>In early 2011 six employees in cost center 2100-3035 Site Assessment supporting SCG were formally transferred from SDGE to SCG. The table displays the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees.</p>							
2011	-5	-0.129	0	-0.1	CCTR Transf	To 2200-2443.000	MHARPER20131 114121542960
<p>In early 2011 six employees in cost center 2100-3035 Site Assessment supporting SCG were formally transferred from SDGE to SCG. The table displays the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees.</p>							

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Environmental Compliance
 Category-Sub: 1. Environmental Compliance
 Workpaper: 1EV000.000 - ENVIRONMENTAL SDGE NSS Cost Center

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From Cctr</u>	<u>RefID</u>
2011	-3	-0.153	0	-0.1	CCTR Transf	To 2200-2012.000	MHARPER20131 114121659840

In early 2011 six employees in cost center 2100-3035 Site Assessment supporting SCG were formally transferred from SDGE to SCG. The table displays the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees.

2011 Total	-30	-0.815	0	-0.4			
-------------------	------------	---------------	----------	-------------	--	--	--

2012 Total	0	0	0	0.0			
-------------------	----------	----------	----------	------------	--	--	--

2013	8	0	0	0.2	CCTR Transf	From 2100-0648.000	CSCHRAMM2014 0211170446100
------	---	---	---	-----	-------------	--------------------	-------------------------------

Transfer labor and FTE associated with Environmental Op. Assistant from cost center 2100-0648 in work group 100001 Meter Reading to cost center 2100-0190 in work group 1EV000 Environmental to align function to where activity resides.

2013 Total	8	0	0	0.2			
-------------------	----------	----------	----------	------------	--	--	--

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 1EV000.000

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Water Agency Fee Increases [Cost Center: 1EV000.000]

	# Facilities	Existing Avg. Fee	Estimated Fee (\$) by Year			Estimated Permit Fee Increase (\$) Compared to 2013			Comment
			2014	2015	2016	2014	2015	2016	
Industrial Storm Water Permits - Palomar Energy Center	1	\$ 1,359	\$ 1,586	\$ 1,851	\$ 2,160	\$ 227	\$ 492	\$ 801	2014 - 2016 based on avg last 4 year increases in fee schedule
Industrial Storm Water Permits - Miramar	1	\$ 1,359	\$ 1,586	\$ 1,851	\$ 2,160	\$ 227	\$ 492	\$ 801	2014 - 2016 based on avg last 4 year increases in fee schedule
Industrial Storm Water Permits - Kearny	1	\$ 1,359	\$ 1,586	\$ 1,851	\$ 2,160	\$ 227	\$ 492	\$ 801	2014 - 2016 based on avg last 4 year increases in fee schedule
Power Plant National Pollutant Discharge Elimination System Permits - Palomar Energy Center	1	\$ 7,166	\$ 8,362	\$ 9,758	\$ 11,386	\$ 1,196	\$ 2,592	\$ 4,220	2014 - 2016 based on avg last 4 year increases in fee schedule
Industrial Storm Water Permits						\$ 681	\$ 1,476	\$ 2,403	
Power Plant National Pollutant Discharge Elimination Permits						\$ 1,196	\$ 2,592	\$ 4,220	
Grand Total						\$ 1,877	\$ 4,068	\$ 6,623	

Industrial Storm Water Permits

	Estimated Average Increase/ Year				Estimated increased cost/facility compared to 2013		
	2013	2014	2015	2016	2014	2015	2016
Palomar Energy Center	\$ 1,359	\$ 1,586	\$ 1,851	\$ 2,160	\$ 227	\$ 492	\$ 801
Miramar	\$ 1,359	\$ 1,586	\$ 1,851	\$ 2,160	\$ 227	\$ 492	\$ 801
Kearny	\$ 1,359	\$ 1,586	\$ 1,851	\$ 2,160	\$ 227	\$ 492	\$ 801
Increased cost/ project compared to 2013					\$ 681	\$ 1,476	\$ 2,403

Storm Water Resources Control Board Fee History (Miramar, Kearny & Palomar Energy Center)

	Fee	Fee	% Increase
2009-10	\$ 1,008	\$ 1,008	
2010-11	\$ 1,008	\$ 1,008	0.0%
2011-12	\$ 1,359	\$ 1,359	34.8%
2012-13	\$ 1,359	\$ 1,359	0.0%
2013-14	\$ 1,791	\$ 1,791	31.8%
Average % increase =			16.7%

Power Plant National Pollutant Discharge Elimination Permit - Palomar Energy Center (PEC)

	Threat/ Complexity	Permitted Flow (MGD)	Estimated Average Increase/ Year			
			2013	2014	2015	2016
Palomar Energy Center (2A)	0	1.40	\$ 7,166	\$ 8,362	\$ 9,758	\$ 11,386
Increased cost/ project compared to 2013			\$ 1,196	\$ 2,592	\$ 4,220	

Storm Water Resources Control Board Fee (Formula) History¹

	Fee	% Increase
2009-10	\$ 2,768	
2010-11	\$ 2,768	0.0%
2011-12	\$ 4,446	60.6%
2012-13	\$ 4,446	0.0%
2013-14	\$ 4,717	6.1%
Average % increase =		16.7%

¹ History based on fee schedule formula not PEC's actual fee since Palomar's first annual fee was paid in 2013

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Water Agency Fee Increases [Cost Center: 1EV000.000]

(Page 1 of 2)

4114111004 SENT ON 2/8/13
[Signature]



INVOICE

Annual Permit Fees Required by Sections 13260 & 13269
of the California Water Code

FACILITY ID (WDID): 9 371020131
FACILITY NAME: PALOMAR ENERGY CENTER
2300 HARVESON PLACE
ESCONDIDO, CA 92029

INVOICE NO: SW-0056811
BILLING PERIOD: 01/01/13 - 12/31/13
INVOICE DATE: 1/9/2013
INDEX NO: 183271

SAN DIEGO GAS & ELECTRIC
ENV OPS MANAGER
8315 CENTURY PK CT
SAN DIEGO, CA 92123

Total Amount Due by
Friday, February 8, 2013 \$ 1,359.00

Invoice details are shown on the back

STATE WATER RESOURCES CONTROL BOARD
Annual Permit Fee

Facility ID: 9 371020131 RM #: 298158 Billing Period: 01/01/13 - 12/31/13
Invoice No: SW-0056811 Amount Due: \$ 1,359.00 Due By: Friday, February 8, 2013

PLEASE REMIT YOUR PAYMENT ON OR BEFORE THE DUE DATE SHOWN ABOVE. LATE PAYMENT COULD RESULT IN PENALTIES UNDER PROVISIONS OF THE WATER CODE SECTION 13267. THESE ACTIONS COULD INCLUDE DAILY PENALTIES IN ADDITION TO YOUR FEE OR OTHER ACTIONS DEEMED APPROPRIATE BY THE REGIONAL BOARD.
PLEASE NOTE THAT TRANSFER OF OWNERSHIP OR RELOCATION OF THE FACILITY REQUIRE A NEW STORMWATER PERMIT. IF YOUR FACILITY IS CLOSED OR PROJECT COMPLETED, PLEASE FILE A NOTICE OF TERMINATION.

Make your check payable to SWRCB FEES

If you have any questions about this invoice, please call the Water Board at 916-341-5247.
For more information, please visit our website at <http://www.waterboards.ca.gov/resources/fees/>



Retain this portion for your records
Please detach and return this portion with your payment

CHECK HERE FOR ADDRESS CORRECTION ON THE BACK

INVOICE NO: SW-0056811

INDEX NO: 183271

(Please print the above number on check or money order)

RM #: 298158

SAN DIEGO GAS & ELECTRIC
ENV OPS MANAGER
8315 CENTURY PK CT
SAN DIEGO, CA 92123
(760) 432-2504

AMOUNT DUE: \$1,359.00
BILLING PERIOD: 01/01/13 - 12/31/13
DUE BY: 2/8/13
FACILITY ID (WDID): 9 371020131
FACILITY NAME: PALOMAR ENERGY CENTER
2300 HARVESON PLACE
ESCONDIDO, CA 92029

SWRCB
PO BOX 1888
SACRAMENTO, CA 95812-1888

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Water Agency Fee Increases [Cost Center: 1EV000.000]

(Page 1 of 2)



INVOICE

Annual Permit Fees Required by Sections 13260 & 13269
of the California Water Code

FACILITY ID (WDID): 9 371012384
FACILITY NAME: SAN DIEGO GAS & ELECTRIC MIRAM
6875 CONSOLIDATED WAY
SAN DIEGO, CA 92121

INVOICE NO: SW-0063038
BILLING PERIOD: 04/01/13 - 03/31/14
INVOICE DATE: 4/3/2013
INDEX NO: 189518

SEMPRA ENERGY AND SDG&E
WILLIE GATERS
PO BOX 129007 AIR WATER GROUP
ENVIRONMENTAL PROGRAMS
SAN DIEGO, CA 92112

Total Amount Due by
Friday, May 3, 2013 \$ 1,359.00

Invoice details are shown on the back

STATE WATER RESOURCES CONTROL BOARD
Annual Permit Fee

Facility ID: 9 371012384 RM #: 218504 Billing Period: 04/01/13 - 03/31/14
Invoice No: SW-0063038 Amount Due: \$ 1,359.00 Due By: Friday, May 3, 2013

PLEASE REMIT YOUR PAYMENT ON OR BEFORE THE DUE DATE SHOWN ABOVE. LATE PAYMENT COULD RESULT IN PENALTIES UNDER PROVISIONS OF THE WATER CODE SECTION 13261. THESE ACTIONS COULD INCLUDE DAILY PENALTIES IN ADDITION TO YOUR FEE OR OTHER ACTIONS DEEMED APPROPRIATE BY THE REGIONAL BOARD.
PLEASE NOTE THAT TRANSFER OF OWNERSHIP OR RELOCATION OF THE FACILITY REQUIRE A NEW STORM WATER PERMIT. IF YOUR FACILITY IS CLOSED OR PROJECT COMPLETED, PLEASE FILE A NOTICE OF TERMINATION.

Make your check payable to SWRCB FEES

If you have any questions about this invoice, please call the Water Board at 916-341-5247.
For more information, please visit our website at <http://www.waterboards.ca.gov/resources/fees/>



Retain this portion for your records

Please detach and return this portion with your payment

CHECK HERE FOR ADDRESS CORRECTION ON THE BACK

INVOICE NO: SW-0063038

INDEX NO: 189518

(Please print the above number on check or money order)

RM #: 218504

SEMPRA ENERGY AND SDG&E
WILLIE GATERS
PO BOX 129007 AIR WATER GROUP
ENVIRONMENTAL PROGRAMS
SAN DIEGO, CA 92112
(658) 650-6171

AMOUNT DUE: \$1,359.00
BILLING PERIOD: 04/01/13 - 03/31/14
DUE BY: 5/3/13
FACILITY ID (WDID): 9 371012384
FACILITY NAME: SAN DIEGO GAS & ELECTRIC MIRAM
6875 CONSOLIDATED WAY
SAN DIEGO, CA 92121

SWRCB
PO BOX 1888
SACRAMENTO, CA 95812-1888

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Water Agency Fee Increases [Cost Center: 1EV000.000]

(Page 2 of 2)

**STATE WATER RESOURCES CONTROL BOARD
INVOICE DETAILS**

FACILITY ID (WDID): 9 371012384
ORDER NO: 97-03DW

INVOICE NO: SW-0063038
BILLING PERIOD: 04/01/13 - 03/31/14
REGION: 9

DESCRIPTION	AMOUNT
70 SB ISSUED SW INDUSTRIAL	1,123.00
30 SWAMP Fee Basis: Ambient Surcharge	236.00
TOTAL AMOUNT DUE	\$ 1,359.00

If you have any questions about this invoice, please call
the Water Board at 916-341-5247.

For payment status of your invoice, please go to the "Stormwater and Wastewater permit Fee Invoice Information" link at

<http://water101.waterboards.ca.gov/dwqdas/feeunit/search/DischargerInvoiceInfo.asp>

Please allow 15 business days after mailing for your payment to be posted to the database.

BILLING ADDRESS CORRECTIONS

Please print the new billing address information in the space provided below

FACILITY ID (WDID): 9 371012384 SAN DIEGO GAS & ELECTRIC MIRAM

BILLING NAME:

CONTACT PERSON:

STREET:

CITY:

STATE: ZIP: -

PHONE: () -

EMAIL ADDRESS:

Quarter 4

9

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Water Agency Fee Increases [Cost Center: 1EV000.000]

(Page 1 of 2)



INVOICE

Processed on: _____
Check # 1204730
Cashed on: _____
DOCH 304533

Annual Permit Fees Required by Sections 13260 & 13269
of the California Water Code

FACILITY ID (WDID): 9 371002935 SDGE - KERNAN FACILITY
FACILITY NAME: SAN DIEGO GAS & ELECTRIC
5488 OVERLAND AVE
SAN DIEGO, CA 92101

INVOICE NO: SW-0063815
BILLING PERIOD: 04/01/13 - 03/31/14
INVOICE DATE: 4/3/2013
INDEX NO: 190295

SEMPRA ENERGY AND SDG&E
WILLIE GATERS
PO BOX 129007
SAN DIEGO, CA 92112

Total Amount Due by
Friday, May 3, 2013 \$ 1,359.00

*update to
ENVTT ops*

Invoice details are shown on the back

STATE WATER RESOURCES CONTROL BOARD
Annual Permit Fee

Facility ID: 9 371002935 RM #: 218228 Billing Period: 04/01/13 - 03/31/14
Invoice No: SW-0063815 Amount Due: \$ 1,359.00 Due By: Friday, May 3, 2013

PLEASE REMIT YOUR PAYMENT ON OR BEFORE THE DUE DATE SHOWN ABOVE. LATE PAYMENT COULD RESULT IN PENALTIES UNDER PROVISIONS OF THE WATER CODE SECTION 13261. THESE ACTIONS COULD INCLUDE DAILY PENALTIES IN ADDITION TO YOUR FEE OR OTHER ACTIONS DEEMED APPROPRIATE BY THE REGIONAL BOARD.
PLEASE NOTE THAT TRANSFER OF OWNERSHIP OR RELOCATION OF THE FACILITY REQUIRE A NEW STORM WATER PERMIT IF YOUR FACILITY IS CLOSED OR PROJECT COMPLETED. PLEASE FILE A NOTICE OF TERMINATION.

Make your check payable to SWRCB FEES

If you have any questions about this invoice, please call the Water Board at 916-341-5247.
For more information, please visit our website at <http://www.waterboards.ca.gov/resources/fees/>



Retain this portion for your records
Please detach and return this portion with your payment

CHECK HERE FOR ADDRESS CORRECTION ON THE BACK

INVOICE NO: SW-0063815
INDEX NO: 190295
(Please print the above number on check or money order)

RM #: 218228

SEMPRA ENERGY AND SDG&E
WILLIE GATERS
PO BOX 129007
SAN DIEGO, CA 92112
(858) 650-6171

SWRCB
PO BOX 1888
SACRAMENTO, CA 95812-1888

AMOUNT DUE: \$1,359.00
BILLING PERIOD: 04/01/13 - 03/31/14
DUE BY: 5/3/13
FACILITY ID (WDID): 9 371002935
FACILITY NAME: SAN DIEGO GAS & ELECTRIC
5488 OVERLAND AVE
SAN DIEGO, CA 92101

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Water Agency Fee Increases [Cost Center: 1EV000.000]

(Page 2 of 2)

Processed on: _____
Checked by: _____
Created on: _____

**STATE WATER RESOURCES CONTROL BOARD
INVOICE DETAILS**

FACILITY ID (WDID): 9 371002935
ORDER NO: 97-03DW

INVOICE NO: SW-0063815
BILLING PERIOD: 04/01/13 - 03/31/14
REGION: 9

DESCRIPTION	AMOUNT
70 SB ISSUED SW INDUSTRIAL	1,123.00
30 SWAMP Fee Basis: Ambient Surcharge	236.00
TOTAL AMOUNT DUE	\$ 1,359.00

If you have any questions about this invoice, please call
the Water Board at 916-341-5247.

For payment status of your invoice, please go to the "Stormwater and Wastewater permit Fee Invoice Information" link at

<http://water101.waterboards.ca.gov/dwqdas/feeunit/search/DischargerInvoiceInfo.asp>

Please allow 15 business days after mailing for your payment to be posted to the database.

BILLING ADDRESS CORRECTIONS

Please print the new billing address information in the space provided below

FACILITY ID (WDID): 9 371002935 SAN DIEGO GAS & ELECTRIC

BILLING NAME:	<input type="text"/>
CONTACT PERSON:	<input type="text"/>
STREET:	<input type="text"/>
CITY:	<input type="text"/>
STATE:	<input type="text"/> ZIP: <input type="text"/>
PHONE:	(<input type="text"/>) <input type="text"/> - <input type="text"/>
EMAIL ADDRESS:	<input type="text"/>

Quarter 4 9

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Water Agency Fee Increases [Cost Center: 1EV000.000]

(Page 1 of 3)



INVOICE

Annual Permit Fees Required by Sections 13260 & 13269
of the California Water Code

FACILITY ID (WDID): 9 000002388
FACILITY NAME: PALOMAR ENERGY CENTER
2300 HARVESON
ESCONDIDO, CA 92029

INVOICE NO: WD-0087075
BILLING PERIOD: 07/01/13 - 06/30/14
INVOICE DATE: 10/30/2013
INDEX NO: 194758

Total Amount Due by
Friday, November 29, 2013 \$ 7,166.00

SAN DIEGO GAS AND ELECTRIC
DANIEL BAERMAN
2300 HARVESON PLACE
ESCONDIDO, CA 92029

Invoice details are shown on the back

STATE WATER RESOURCES CONTROL BOARD
Annual Permit Fee

Facility ID: 9 000002388 RM #: 382512 Billing Period: 07/01/13 - 06/30/14
Invoice No: WD-0087075 Amount Due: \$ 7,166.00 Due By: Friday, November 29, 2013

PLEASE REMIT YOUR PAYMENT ON OR BEFORE THE DUE DATE SHOWN ABOVE. LATE PAYMENT COULD RESULT IN PENALTIES UNDER PROVISIONS OF THE WATER CODE SECTION 13261. THESE ACTIONS COULD INCLUDE DAILY PENALTIES IN ADDITION TO YOUR FEE OR OTHER ACTIONS DEEMED APPROPRIATE BY THE REGIONAL BOARD.

Make your check payable to State Water Resources Control Board

If you have any questions about this invoice, please call the Water Board at 619-521-3919.

Retain this portion for your records
Please detach and return this portion with your payment

CHECK HERE FOR ADDRESS CORRECTION ON THE BACK

INVOICE NO: WD-0087075

INDEX NO: 194758

(Please print the above number on check or money order)

SAN DIEGO GAS AND ELECTRIC
DANIEL BAERMAN
2300 HARVESON PLACE
ESCONDIDO, CA 92029
(760) 432-2501

update

RM #: 382512

AMOUNT DUE: \$7,166.00
BILLING PERIOD: 07/01/13 - 06/30/14
DUE BY: 11/29/13
FACILITY ID (WDID): 9 000002388
FACILITY NAME: PALOMAR ENERGY CENTER
2300 HARVESON
ESCONDIDO, CA 92029

SWRCB
PO BOX 1888
SACRAMENTO, CA 95812-1888

Supplemental Workpaper: Bureau of Land Management Pesticide Use Permit [Cost Center: 1EV000.000]

The Bureau of Land Management requires SDG&E to obtain a Pesticide Use Permit in order to apply herbicides around the bases of the electric distribution poles on Bureau of Land Management lands. Vegetation Management intends to apply herbicide to 62 distribution poles on Bureau of Land Management lands that are spread throughout SDG&E's service territory. Bureau of Land Management lands are divided between two district offices within SDG&E service territory, Palm Springs and El Centro. Each office will require a separate Pesticide Use Permit application and therefore require two separate Environmental Assessments. Based on the boundaries of the district offices, 20 poles are located within the El Centro district and 42 poles are located in the Palm Springs district. It is anticipated that the applications will be filed in 2015 for the El Centro district and 2016 for the Palm Springs district. Environmental survey reports (biological and cultural) are required as technical support documents to the Environmental Assessment that identify existing conditions, potential impacts, and applicable minimization measures for the application of herbicides at the individual pole sites. Costs of each environmental survey were calculated using existing contracts with SDG&E for Natural Resources (biological) and Cultural Resources.

	Total Expected Costs per Year		
	2014	2015	2016
Environmental Assessments ¹	\$ -	\$ 75,000	\$ 75,000
Biological Resource Report	\$ -	\$ 4,500	\$ 9,450
Cultural Resource Report	\$ -	\$ 7,000	\$ 14,700
Total	\$ -	\$ 86,500	\$ 99,150

¹ See Proposal from SDG&E Consultant (AECOM)

Costs Estimate for Biological Resources Report for each Environmental Assessment:

District Office	No. of Poles per PUP	Cost per Pole¹	Total Cost
El Centro (2015)	20	\$ 225	\$ 4,500
Palm Springs (2016)	42	\$ 225	\$ 9,450

¹ Cost per Pole was determined using existing per pole cost from the existing widget contract for Natural Resources under the category for 20 or greater work lots (sites/poles).

Costs Estimate for Cultural Resources Report for each Environmental Assessment:

District Office	No. of Poles per PUP	Cost per Pole¹	Total Cost
El Centro (2015)	20	\$ 350	\$ 7,000
Palm Springs (2016)	42	\$ 350	\$ 14,700

¹ Cost per Pole was determined using existing per pole cost from the existing widget contract for Cultural Resources under the category for 11-49 poles.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Bureau of Land Management Pesticide Use Permit [Cost Center: 1EV000.000]



AECOM 619.233.1454 tel
1420 Kettner Boulevard 619.233.0952 fax
Suite 500
San Diego, CA 92101
www.aecom.com

November 4, 2013

Bryan Bennett
Project Manager Sunrise O&M
San Diego Gas & Electric
8315 Century Park Court, CP21E
San Diego, CA 92123

Subject: General scope and fee estimate to prepare an Environmental Assessment (EA) to obtain Pesticide Use Proposal (PUP) approval on Bureau of Land Management (BLM) Administered Lands

Dear Bryan:

The professionals at AECOM Technical Services, Inc. have a long-term relationship with San Diego Gas and Electric (SDG&E). We recently prepared an EA to obtain PUP approval for Sunrise restoration activities on temporary impact areas on BLM lands. We understand you need a general scope/fee to prepare an EA to obtain PUP approval to use herbicides on BLM land in SDG&E service territories outside of the Sunrise Powerlink project for O&M activities. Per your request, this general cost/fee can assist SDG&E with budget projections for preparing subsequent EAs.

This scope reflects our ongoing Sunrise experience with PUP EAs for the BLM field office, as these EAs require very detailed analyses. Each BLM field office may have their own requirements for level of analysis, so the scope/fee could vary. A project-specific cost/fee would need to be prepared once project details are available.

Scope of Work

Per your October 30, 2013, email, this generalized scope of work is for the preparation of an EA to obtain a PUP to apply BLM-approved herbicides on BLM land at approximately 21 SDG&E pole locations in SDG&E service territory (outside of Sunrise) in San Diego County.

Environmental Assessment

The EA would be facilitated through the process by the BLM field office and state National Environmental Policy Act (NEPA) representatives. The EA would be consistent with the BLM's template. Alternatives to the proposed action would be described and evaluated (up to three alternatives could be analyzed). The EA would also include analysis of the No Action Alternative and Alternatives Considered but Eliminated from Detailed Analysis.

This scope assumes SDG&E would provide all technical studies, including biological and cultural resources surveys, and assumes no other technical studies are required for completion of the assessment. The technical areas that would be expected to be discussed in more detail in the document would be determined based on any previous environmental documentation, the site locations, and resources present or anticipated to be present

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Bureau of Land Management Pesticide Use Permit [Cost Center: 1EV000.000]



Bryan Bennett
Project Manager Sunrise O&M
San Diego Gas & Electric
November 4, 2013
Page 2

on-site. Typical technical areas that could be analyzed in an EA for herbicide use include, but are not limited to, the following:

- Vegetation
- Soils
- Riparian and Wetland Areas
- Fire and Hazardous Fuels
- Invasive, Nonnative Species (Including Noxious Weeds)
- Wildlife and Special Status Species
- Water Quality
- Cultural Resources

This scope assumes one public review or public comment period would be required and the NEPA process would be facilitated by the BLM field office, including preparation of the Finding of No Significant Impact (FONSI).

This scope includes the following deliverables:

- Two internal electronic copies of the screencheck draft EA and one internal draft for SDG&E review and comment.
- One hard copy administrative draft EA for submittal to BLM for review and one electronic copy to SDG&E.
- Responses to no more than twenty-five (25) public comments received during the public review period.
- One hard copy of the final EA for submittal to BLM and State office for approval. One electronic copy to SDG&E.

Assumptions:

- EA would be prepared utilizing any previously approved environmental documentation (if available).
- No new technical studies or data are required.
- EA would focus on overall impacts from a larger project and is not expected to have impacts not already analyzed. Site-by-site analysis is not included in this fee.
- No more than two internal SDG&E screencheck drafts, one SDG&E internal draft, one administrative draft version to BLM, and one final EA submitted to BLM will be prepared.
- Duration and management of the effort do not exceed six (6) months. Additional duration and management would not be a part of the scope of work.
- This scope does not include comments or revisions from a third party.
- No participation or coordination for public hearings is included.
- This scope of work does not include preparation of a PUP(s) for submittal to BLM for review or State office for approval.
- Any additional review cycles beyond the five (5) included herein would be billed as an additional cost (three SDG&E internal review, one administrative draft EA for submittal to BLM and one final EA for submittal to BLM). Each additional review

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Bureau of Land Management Pesticide Use Permit [Cost Center: 1EV000.000]

AECOM

Bryan Bennett
Project Manager Sunrise O&M
San Diego Gas & Electric
November 4, 2013
Page 3

cycle would be approved by the client prior to AECOM performing the work; the fee for that review would be agreed upon between SDG&E and AECOM given the extent of comments.

Fee Estimate

The estimated fee range for the preparation of an EA for the services described above is approximately \$75,000 to \$85,000.

As stated above, this scope/fee estimate is to provide SDG&E with a general idea of the cost to prepare an EA to facilitate PUP approval by BLM for budgeting projections. Project specific details, information and analysis would directly affect the potential cost and timing. Please let us know if you need any further information.

Sincerely,



Patty Anders
Project Manager



Teri Fenner
Principal-in-Charge

cc. Linda Collins, Sunrise Environmental Operations Manager
Marc Doalson, Senior Environmental Specialist

60216119 Scope for EA_SDGE

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: B. New Environmental Reg Balancing Acct (NERBA)
Workpaper: VARIOUS

Summary for Category: B. New Environmental Reg Balancing Acct (NERBA)

	In 2013\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	3	3	3	3
Non-Labor	0	34	45	136
NSE	783	820	870	870
Total	786	857	918	1,009
FTE	0.0	0.0	0.0	0.0

Workpapers belonging to this Category:

1EV000.001 RNERBA - ENVIRONMENTAL FEES - ELECTRIC REFUNDABLE

Labor	0	0	0	0
Non-Labor	0	34	45	94
NSE	223	260	310	310
Total	223	294	355	404
FTE	0.0	0.0	0.0	0.0

1EV000.002 RNERBA - ENVIRONMENTAL FEES - GAS REFUNDABLE

Labor	3	3	3	3
Non-Labor	0	0	0	42
NSE	560	560	560	560
Total	563	563	563	605
FTE	0.0	0.0	0.0	0.0

Note: Totals may include rounding differences.

Beginning of Workpaper

1EV000.001 - RNERBA - ENVIRONMENTAL FEES - ELECTRIC REFUNDABLE

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: B. New Environmental Reg Balancing Acct (NERBA)
Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
Workpaper: 1EV000.001 - RNERBA - ENVIRONMENTAL FEES - ELECTRIC REFUNDABLE

Activity Description:

This is a refundable cost category related to electric operations that will be recorded in a regulatory two-way balancing account called the New Environmental Regulatory Balancing Account ("NERBA").

Forecast Explanations:

Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements for NERBA as a cost category. The proposed new additions to NERBA (MS4 O&M and Capital and LDAR) are treated as incremental costs to the base year amount. As NERBA items are not readily predictable given the attributes for NERBA inclusion described earlier, traditional averaging of historical amounts would be less reliable than using base year as a starting point. Trending likewise posed less than reliable forecasts than the base year method. For instance, for cost center 1EV000.001 (RNERBA Environmental Fees – Electric Refundable) and 1EV000.002 (RNERBA Environmental Fees – Gas Refundable), a 3-year linear trend produced a negative number which is not a valid forecast result and was therefore rejected. A 5-year average would produce an inappropriately low forecast because it would not reflect AB32 Administrative Fees in 2009 historical costs since this fee began to be incurred in 2010. Because the NERBA is proposed as a 2-way balancing account, any over- or under-collections will be reconciled and adjusted in rates. Note that there were no Labor adjustments for cost center 1EV000.001.

Non-Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements for NERBA as a cost category. The proposed new additions to NERBA (MS4 O&M and Capital and LDAR) are treated as incremental costs to the base year amount. As NERBA items are not readily predictable given the attributes for NERBA inclusion described earlier, traditional averaging of historical amounts would be less reliable than using base year as a starting point. Trending likewise posed less than reliable forecasts than the base year method. For instance, for cost center 1EV000.001 (RNERBA Environmental Fees – Electric Refundable) and 1EV000.002 (RNERBA Environmental Fees – Gas Refundable), a 3-year linear trend produced a negative number which is not a valid forecast result and was therefore rejected. A 5-year average would produce an inappropriately low forecast because it would not reflect AB32 Administrative Fees in 2009 historical costs since this fee began to be incurred in 2010. Because the NERBA is proposed as a 2-way balancing account, any over- or under-collections will be reconciled and adjusted in rates.

NSE - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements for NERBA as a cost category. The proposed new additions to NERBA (MS4 O&M and Capital and LDAR) are treated as incremental costs to the base year amount. As NERBA items are not readily predictable given the attributes for NERBA inclusion described earlier, traditional averaging of historical amounts would be less reliable than using base year as a starting point. Trending likewise posed less than reliable forecasts than the base year method. For instance, for cost center 1EV000.001 (RNERBA Environmental Fees – Electric Refundable) and 1EV000.002 (RNERBA Environmental Fees – Gas Refundable), a 3-year linear trend produced a negative number which is not a valid forecast result and was therefore rejected. A 5-year average would produce an inappropriately low forecast because it would not reflect AB32 Administrative Fees in 2009 historical costs since this fee began to be incurred in 2010. Because the NERBA is proposed as a 2-way balancing account, any over- or under-collections will be reconciled and adjusted in rates.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. New Environmental Reg Balancing Acct (NERBA)
 Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
 Workpaper: 1EV000.001 - RNERBA - ENVIRONMENTAL FEES - ELECTRIC REFUNDABLE

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2009	2010	2011	2012	2013	2014	2015	2016	
Labor		0	0	0	0	0	0	0	0	
Non-Labor		0	0	0	0	0	34	45	94	
NSE		0	0	643	349	223	260	310	310	
Total		0	0	643	349	223	294	355	404	
FTE		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. New Environmental Reg Balancing Acct (NERBA)
 Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
 Workpaper: 1EV000.001 - RNERBA - ENVIRONMENTAL FEES - ELECTRIC REFUNDABLE

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	0	0	0	0	0	0	0	0	0
Non-Labor	Base YR Rec	0	0	0	34	45	94	34	45	94
NSE	Base YR Rec	223	223	223	37	87	87	260	310	310
Total		223	223	223	71	132	181	294	355	404
FTE	Base YR Rec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2014	0	0	37	37	0.0	1-Sided Adj
Assembly Bill 32 Administration Fees - Electric: Assembly Bill 32 fees fluctuate due to variability of cost of carbon and amount of power generated						
2014	0	34	0	34	0.0	1-Sided Adj
Municipal Separate Storm Sewer System Permit: Consultant costs for Municipal Separate Storm Sewer System permit impacts analysis of co-permittee jurisdictional and Water Quality Improvement Plans requirements on SDG&E facilities and operations.						
2014 Total	0	34	37	71	0.0	
2015	0	0	87	87	0.0	1-Sided Adj
Assembly Bill 32 Administration Fees - Electric: Assembly Bill 32 fees fluctuate due to variability of cost of carbon and amount of power generated						
2015	0	45	0	45	0.0	1-Sided Adj
Municipal Separate Storm Sewer System Permit: Consultant costs for Municipal Separate Storm Sewer System permit impacts analysis of co-permittee jurisdictional and Water Quality Improvement Plans requirements on SDG&E facilities and operations.						
2015 Total	0	45	87	132	0.0	
2016	0	0	87	87	0.0	1-Sided Adj
Assembly Bill 32 Administration Fees - Electric: Assembly Bill 32 fees fluctuate due to variability of cost of carbon and amount of power generated						

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
 2016 GRC - APP
 Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. New Environmental Reg Balancing Acct (NERBA)
 Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
 Workpaper: 1EV000.001 - RNERBA - ENVIRONMENTAL FEES - ELECTRIC REFUNDABLE

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2016	0	19	0	19	0.0	1-Sided Adj

Municipal Separate Storm Sewer System Permit: Consultant costs for Municipal Separate Storm Sewer System permit impacts analysis of co-permittee jurisdictional and Water Quality Improvement Plans requirements on SDG&E facilities and operations.

2016	0	75	0	75	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Polychlorinated Biphenyls Phase Out: Consultant to analyze impacts of Polychlorinated Biphenyls Phase Out of electrical equipment and scope implementation plan once final rule is adopted.

2016 Total	0	94	87	181	0.0	
-------------------	----------	-----------	-----------	------------	------------	--

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. New Environmental Reg Balancing Acct (NERBA)
 Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
 Workpaper: 1EV000.001 - RNERBA - ENVIRONMENTAL FEES - ELECTRIC REFUNDABLE

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	619	343	223
Total	0	0	619	343	223
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	619	343	223
Total	0	0	619	343	223
FTE	0.0	0.0	0.0	0.0	0.0
Vacation & Sick (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Escalation to 2013\$					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	24	5	0
Total	0	0	24	5	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	643	349	223
Total	0	0	643	349	223
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.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. New Environmental Reg Balancing Acct (NERBA)
 Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
 Workpaper: 1EV000.001 - RNERBA - ENVIRONMENTAL FEES - ELECTRIC REFUNDABLE

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	619	343	223
Total	0	0	619	343	223
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009 Total	0	0	0	0.0			
2010 Total	0	0	0	0.0			
2011	0	0	619	0.0	1-Sided Adj	N/A	MHARPER20140 218071847243
R-NERBA - Assembly Bill 32 Greenhouse Gas Administration Fees (Elect). (2010 and 2011)							
2011 Total	0	0	619	0.0			
2012	0	0	343	0.0	1-Sided Adj	N/A	MHARPER20140 218072201773
R-NERBA - Assembly Bill 32 Greenhouse Gas Administration Fees (Elect).							
2012 Total	0	0	343	0.0			
2013	0	0	223	0.0	1-Sided Adj	N/A	MHARPER20140 218072422510
R-NERBA - Assembly Bill 32 Greenhouse Gas Administration Fees (Elect).							
2013 Total	0	0	223	0.0			

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 1EV000.001

Beginning of Workpaper
1EV000.002 - RNERBA - ENVIRONMENTAL FEES - GAS REFUNDABLE

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: B. New Environmental Reg Balancing Acct (NERBA)
Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
Workpaper: 1EV000.002 - RNERBA - ENVIRONMENTAL FEES - GAS REFUNDABLE

Activity Description:

This is a refundable cost category related to gas operations that will be recorded in a regulatory two-way balancing account called the New Environmental Regulatory Balancing Account ("NERBA").

Forecast Explanations:

Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements for NERBA as a cost category. Gas Cap and Trade related costs have been removed from 2013 recorded costs pursuant to our proposal to remove this item from NERBA for TY 2016. The proposed new additions to NERBA (MS4 O&M and Capital and LDAR) are treated as incremental costs to the base year amount. As NERBA items are not readily predictable given the attributes for NERBA inclusion, traditional averaging of historical amounts would be less reliable than using base year as a starting point. Trending likewise posed less than reliable forecasts than the base year method. For instance, for cost center 1EV000.001 (RNERBA Environmental Fees – Electric Refundable) and 1EV000.002 (RNERBA Environmental Fees – Gas Refundable), a 3-year linear trend produced a negative number which is not a valid forecast result and was therefore rejected. A 5-year average would produce an inappropriately low forecast because it would not reflect AB32 Administrative Fees in 2009 historical costs since this fee began to be incurred in 2010. Because the NERBA is proposed as a 2-way balancing account, any over- or under-collections will be reconciled and adjusted in rates. Note that there were no Labor adjustments for cost center 1EV000.002.

Non-Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements for NERBA as a cost category. Gas Cap and Trade related costs have been removed from 2013 recorded costs pursuant to our proposal to remove this item from NERBA for TY 2016. The proposed new additions to NERBA (MS4 O&M and Capital and LDAR) are treated as incremental costs to the base year amount. As NERBA items are not readily predictable given the attributes for NERBA inclusion, traditional averaging of historical amounts would be less reliable than using base year as a starting point. Trending likewise posed less than reliable forecasts than the base year method. For instance, for cost center 1EV000.001 (RNERBA Environmental Fees – Electric Refundable) and 1EV000.002 (RNERBA Environmental Fees – Gas Refundable), a 3-year linear trend produced a negative number which is not a valid forecast result and was therefore rejected. A 5-year average would produce an inappropriately low forecast because it would not reflect AB32 Administrative Fees in 2009 historical costs since this fee began to be incurred in 2010. Because the NERBA is proposed as a 2-way balancing account, any over- or under-collections will be reconciled and adjusted in rates.

NSE - Base YR Rec

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. New Environmental Reg Balancing Acct (NERBA)
 Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
 Workpaper: 1EV000.002 - RNERBA - ENVIRONMENTAL FEES - GAS REFUNDABLE

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements for NERBA as a cost category. Gas Cap and Trade related costs have been removed from 2013 recorded costs pursuant to our proposal to remove this item from NERBA for TY 2016. The proposed new additions to NERBA (MS4 O&M and Capital and LDAR) are treated as incremental costs to the base year amount. As NERBA items are not readily predictable given the attributes for NERBA inclusion, traditional averaging of historical amounts would be less reliable than using base year as a starting point. Trending likewise posed less than reliable forecasts than the base year method. For instance, for cost center 1EV000.001 (RNERBA Environmental Fees – Electric Refundable) and 1EV000.002 (RNERBA Environmental Fees – Gas Refundable), a 3-year linear trend produced a negative number which is not a valid forecast result and was therefore rejected. A 5-year average would produce an inappropriately low forecast because it would not reflect AB32 Administrative Fees in 2009 historical costs since this fee began to be incurred in 2010. Because the NERBA is proposed as a 2-way balancing account, any over- or under-collections will be reconciled and adjusted in rates. Note that there were no Labor adjustments for cost center 1EV000.002.

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
		2009	2010	2011	2012	2013	2014	2015	2016	
Years										
Labor	0	0	0	0	3	3	3	3		
Non-Labor	0	0	0	0	0	0	0	42		
NSE	0	0	1,401	713	560	560	560	560		
Total	0	0	1,401	713	563	563	563	605		
FTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. New Environmental Reg Balancing Acct (NERBA)
 Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
 Workpaper: 1EV000.002 - RNERBA - ENVIRONMENTAL FEES - GAS REFUNDABLE

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	3	3	3	0	0	0	3	3	3
Non-Labor	Base YR Rec	0	0	0	0	0	42	0	0	42
NSE	Base YR Rec	560	560	560	0	0	0	560	560	560
Total		563	563	563	0	0	42	563	563	605
FTE	Base YR Rec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2014 Total	0	0	0	0	0.0	
2015 Total	0	0	0	0	0.0	
2016	0	42	0	42	0.0	1-Sided Adj
NERBA Greenhouse Gas (GHG) Methane Emissions Leak Detection and Repair (LDAR) Impact Program. - Senate Bill 1371 LDAR is expected to impose new mandatory Greenhouse Gas leak detection and reduction requirements. The cost estimates are based on leak detection and repair efforts. See supplemental workpaper..						
2016 Total	0	42	0	42	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. New Environmental Reg Balancing Acct (NERBA)
 Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
 Workpaper: 1EV000.002 - RNERBA - ENVIRONMENTAL FEES - GAS REFUNDABLE

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Adjustments (Nominal \$) **					
Labor	0	0	0	0	2
Non-Labor	0	0	0	0	0
NSE	0	0	1,349	702	560
Total	0	0	1,349	702	562
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	0	0	2
Non-Labor	0	0	0	0	0
NSE	0	0	1,349	702	560
Total	0	0	1,349	702	562
FTE	0.0	0.0	0.0	0.0	0.0
Vacation & Sick (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Escalation to 2013\$					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	52	11	0
Total	0	0	52	11	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	0	0	0	0	3
Non-Labor	0	0	0	0	0
NSE	0	0	1,401	713	560
Total	0	0	1,401	713	563
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.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. New Environmental Reg Balancing Acct (NERBA)
 Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
 Workpaper: 1EV000.002 - RNERBA - ENVIRONMENTAL FEES - GAS REFUNDABLE

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	0	0	0	0	2
Non-Labor	0	0	0	0	0
NSE	0	0	1,349	702	560
Total	0	0	1,349	702	562
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009 Total	0	0	0	0.0			
2010 Total	0	0	0	0.0			
2011	0	0	1,349	0.0	1-Sided Adj	N/A	MHARPER20140 221161023900
R-NERBA - Assembly Bill 32 Greenhouse Gas Administration Fees (Gas), (2010 and 2011)							
2011 Total	0	0	1,349	0.0			
2012	0	0	702	0.0	1-Sided Adj	N/A	MHARPER20140 221161534477
R-NERBA - Assembly Bill 32 Greenhouse Gas Administration Fees (Gas),							
2012 Total	0	0	702	0.0			
2013	0	0	560	0.0	1-Sided Adj	N/A	MHARPER20140 221161651453
R-NERBA - Assembly Bill 32 Greenhouse Gas Administration Fees (Gas),							
2013	2	0	0	0.0	1-Sided Adj	N/A	MHARPER20140 221161956020
R-NERBA-Subpart W Gas							

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: B. New Environmental Reg Balancing Acct (NERBA)
Category-Sub: 1. New Environmental Reg Balancing Acct (NERBA)
Workpaper: 1EV000.002 - RNERBA - ENVIRONMENTAL FEES - GAS REFUNDABLE

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From Cctr</u>	<u>RefID</u>
2013 Total	2	0	560	0.0			

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 1EV000.002

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Assembly Bill 32 Administration Fees - Electric [Cost Center: 1EV000.001]

SDG&E Assembly Bill 32 Fee Estimates:

Facility	2013 Fees -- <i>Actual Billed</i> (Based on 2011 emissions)	2014 Fees - <i>Estimate</i> (Based on 2012 emissions)	2015 Fees - <i>Estimate</i> (Based on 2013 emissions)	2016 Fees - <i>Estimate</i> (Based on 2014 emissions)
Electric Power Entity (emission from out of state electrical imports)	\$87,924	\$87,924	\$87,924	\$87,924
Miramar Energy Facility	\$10,849	\$13,721	\$10,987	\$10,987
Palomar Energy Facility	\$122,391	\$154,074	\$207,514	\$207,514
Cuyamaca Peaker	\$1,719	\$3,996	\$3,453	\$3,453
<i>Subtotal for Assembly Bill 32 Fees for Electric</i>	<i>\$222,883</i>	<i>\$259,715</i>	<i>\$309,878</i>	<i>\$309,878</i>
<i>Increase over 2013 Fees</i>		<i>\$36,832</i>	<i>\$86,995</i>	<i>\$86,995</i>

**Supplemental Workpaper: Greenhouse Gas (GHG) Methane Emissions
Leak Detection & Repair (LDAR) Impact Program [Cost Center: 1EV000.002]**

Senate Bill SB1371 (Leno) as enacted (September 14, 2014) requires the California Public Utilities Commission to adopt rules and procedures governing the operation, maintenance, repair, and replacement of commission-regulated gas pipeline facilities to minimize leaks as a hazard to be mitigated pursuant to the Natural Gas Pipeline Safety Act of 2011 and to reduce emissions of natural gas from commission-regulated gas pipeline facilities to the maximum extent feasible. The cost estimates are based on leak detection and repair efforts.

I. Total Expected Costs Per Year

	Total Expected Costs per Year		
	2014	2015	2016
<i>Contractor Labor and Materials Costs</i>			
Inventory Assessment and GHG Monitoring	\$ -	\$ -	\$ 24,189
Materials	\$ -	\$ -	\$ 6,400
<i>Equipment Costs</i>			
Inventory Assessment and GHG Monitoring Equipment	\$ -	\$ -	\$ 7,472
Component Leak Repairs	\$ -	\$ -	\$ 4,000
Total	\$ -	\$ -	\$ 42,061

II. LDAR Impact Program Cost Detail

Inventory Assessment, GHG Monitoring and Repairs (Contractor Labor and Materials Costs)

Inventory Assessment and Periodic GHG Monitoring
 $((22,032) + (58,600)) (1 \text{ facility}) (.20) = \mathbf{\$16,126 \text{ (Moreno)}}$
 $((22,032) + (58,600)) (1 \text{ facility}) (.10) = \mathbf{\$8,063 \text{ (Rainbow)}}$

Inventory Assessment and GHG Monitoring Cost Assumptions
Monitoring Cost = \$22,032 (see Table 3)
Equipment/Component Inventory = \$58,600 (see Table 1)
Work at Moreno facility is expected to cost approximately 20% of base facility cost estimate
Work at Rainbow facility is expected to cost approximately 10% of base facility cost estimate

Materials: Rod Packing & Engine Repairs $(10,000 + 6000) \times (2 \text{ facilities}) (.20) = \mathbf{\$6,400 \text{ per year}}$

Materials: Rod Packing and Engine Repairs Cost Assumptions
Compressor Rod Coating and Cross-Head Repair Cost = \$10,000
Engine Cylinder Packing Cost = \$6,000
Materials costs are based on actual costs incurred by SoCal Gas in 2013
SDG&E facility costs will be approximately 20% of base facility. This cost estimate is based on the number of engines at the SDG&E facilities versus the base facility for which the initial costs were developed.

**Supplemental Workpaper: Greenhouse Gas (GHG) Methane Emissions
Leak Detection & Repair (LDAR) Impact Program [Cost Center: 1EV000.002]**

Inventory Assessment, GHG Monitoring and Repairs (Equipment Costs)

Inventory Assessment and Periodic GHG Monitoring Equipment Cost
(4,920 + 5,487 + 4,536) (2 facilities) (.25) = **\$7,472 (Moreno and Rainbow)**

Inventory and GHG Monitoring Equipment Cost Assumptions

Inventory Materials Cost = \$4,920 (see Table 2)

Inventory Equipment Cost = \$5,487 (See Table 2)

GHG Monitoring Materials and Equipment Cost = \$4,536 (See Table 4)

Work at Moreno and Rainbow facilities is expected to cost approximately 25% of the base facility. This percentage estimate is based on the number of engines at the SDG&E facilities versus the base facility for which the costs were initially developed.

Component Leak Repairs (6,000 + 4000) x (2 facilities) (.20) = **\$4,000 per year**

Component Leak Repairs Cost Assumptions

Engine Cylinder Packing Cost = \$6,000

Valve Replacement Materials Cost = \$4,000

Estimates based on actual work costs from 2013 at SoCal Gas

SDG&E facility costs will be approximately 20% of base facility. This percentage estimate is based on the number of engines at the SDG&E facility versus the base facility for which the costs were initially developed.

III. Equipment/Component Inventory Project Cost Estimate

Table 1. Estimated Contractor Labor Costs

Personnel Classification	Staff Hours Required	Straight Time Hourly Billing Rate	Cost
Field Supervisor	590	\$50.00	\$29,500
Lead Technician	590	\$42.00	\$24,780
LeakDas Data Manager	120	\$36.00	\$4,320
Total			\$58,600

Note: Cost based on 2 man crew @ (4) 10 Hour days for 59 days, plus data manager for 120 hours; both rates are based on straight time.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

**Supplemental Workpaper: Greenhouse Gas (GHG) Methane Emissions
Leak Detection & Repair (LDAR) Impact Program [Cost Center: 1EV000.002]**

Table 2. Estimated Materials Costs

Material Type	Units	Billing Rate	Cost
LeakDas Mobile (PDA)	1 PDA for 59 days	\$25.00/per day usage	\$1,475
Vehicle	1 vehicle for 59 days	\$68.00/per day usage	\$4,012
Sub-Total			\$5,487
Tag Sets (include 1 tag, 1 SS wire)	6,000 tag sets	\$00.82 each	\$4,920
Sub-Total			\$4,920

IV. Greenhouse Gas Monitoring Cost Estimate

Table 3. Estimated Contractor Labor Costs

Personnel Classification	Staff Hours Required	Straight Time Hourly Billing Rate	Cost
Lead Technician	270	\$42.00	\$11,340
Technician	270	\$36.00	\$9,720
LeakDas Data Manager	27	\$36.00	\$972
Total			\$22,032

Note: Cost is based on (2) man crew plus data manager for annual monitoring at straight time.

Table 4. Estimated Materials Costs

Equipment	Units	Billing Rate	Cost
LeakDas Mobile (PDA)	2 PDAs for 27 days	\$25.00/per day usage	\$1,350
TVA 1000B Analyzer	2 PDAs for 27 days	\$25.00/per day usage	\$1,350
Vehicle	1 vehicle for 27 days	\$68.00/per day usage	\$1,836
Total			\$4,536

Note: Cost is based on (2) man crew for annual monitoring.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Supplemental Workpaper: Municipal Separate Storm Sewer System Permit [Cost Center: 1EV000.001]

Consultant costs for Municipal Separate Storm Sewer System permit impacts analysis of co-permittee jurisdictional and Water Quality Improvement Plans requirements on SDG&E facilities and operations.

Tasks and estimated costs for compliance include:

Task 1. Evaluate the requirements of the Municipal Separate Storm Sewer System permit and the co-permittees' jurisdictional requirements and Water Quality Improvement Plans to identify those requirements most likely to directly impact SDG&E and its operations. This evaluation will be composed of several sub-tasks (with anticipated task hours):

- 1A:** Review the Municipal Separate Storm Sewer System permit and the applicable (e.g., within the SDG&E service territory) co-permittees' jurisdictional requirements and Water Quality Improvement Plans (100 hours);
- 1B:** Identify and review SDG&E's main facilities, infrastructure components and operations and maintenance processes within each applicable Water Quality Improvement Plan and/or jurisdictional area (60 hours);
- 1C:** Identify the primary potential changes required for specific facilities, infrastructure components and/or processes in relation to the requirement(s) of each applicable Water Quality Improvement Plan and/or jurisdictional plan (80 hours);
Compile a matrix of the potential changes required for each Water Quality Improvement Plan and/or jurisdictional area
- 1D:** and include any known existing permit requirements for each facility, infrastructure component and/or operations and maintenance process (120 hours).

Task 2. Provide specific prescriptions for Best Management Practices that would ensure SDG&E's compliance with the jurisdictional requirements and/or Water Quality Improvement Plans identified in Tasks 1C and 1D. In addition, develop options for implementing permanent post-construction Best Management Practices on linear projects to ensure compliance with the new Municipal Separate Storm Sewer System requirements and identify new permanent post-construction Best Management Practice requirements for traditional footprint projects (120 hours).

Task 3. Attend meetings with the applicable co-permittees during the jurisdictional plan and Water Quality Improvement Plan process to advocate for the inclusion and/or exception of elements that will assist SDG&E with continued implementation of its infrastructure construction, operations and maintenance programs. Support discussions with the co-permittees regarding adoption and incorporation of specific ordinances and provide input on when post-construction Best Management Practices would or should be required on linear projects (220 hours).

Assumptions: For all tasks hourly rate for principal scientist or engineer is \$140.

Task 1A – Assumes review would be completed as documents become available between January 2014 and May 2015.

Task 1B – Assumes SDG&E would provide specific information to assist in the review consistent with Federal Energy Regulatory Commission regulations, review completed in 2014.

Task 1C – Assumes potential changes would be identified as specific regulations, ordinances and requirements are adopted by co-permittees.

Task 1D – Assumes matrix would be compiled as information becomes available between January 2014 and May 2015.

Task 2 – Assumes Best Management Practices would be established for specific facilities, infrastructure components and/or operations and maintenance processes within each specific jurisdictional area and/or Water Quality Improvement Plan and implementation options would be described for each Best Management Practice.

Task 3 - Assumes attendance by consultant at up to 24 two-hour meetings per year between January 2014 and December 2016, and attendance at monthly internal meetings (as-required) with SDG&E during this time period.

Summary of the costs associated with the above listed tasks:

Task	Estimated Hours	Estimated Rate (\$/Hr.)	Estimated Total (\$)
Task			
1A	100	\$140	14,000
1B	60	\$140	8,400
1C	80	\$140	11,200
1D	120	\$140	16,800
Task 2	120	\$140	16,800
Task 3	220	\$140	30,800
Total	700		\$98,000

San Diego Gas & Electric Company
 2016 GRC - APP
 Non-Shared Service Workpapers

Supplemental Workpaper: Municipal Separate Storm Sewer System Permit [Cost Center: 1EV000.001]

These costs are expected to occur in the following years:

Task	2014 (Estimated \$)	2015 (Estimated \$)	2016 (Estimated \$)	Total
Task				
1A	7,000	7,000		14,000
1B	8,400			8,400
1C		11,200		11,200
1D	8,400	8,400		16,800
Task 2		8,400	8,400	16,800
Task 3	10,200	10,200	10,400	30,800
Total	\$34,000	\$45,200	\$18,800	\$98,000

Supplemental Workpaper: Polychlorinated Biphenyls (PCB) Reassessment of Use Authorization [Cost Center: 1EV000.001]

Polychlorinated Biphenyls (PCB) Advanced Notice of Proposed Rulemaking (ANPRM); Reassessment of Use Authorization cost estimates for inventorying and removal of Polychlorinated Biphenyls \geq 50.0 ppm.

I. Scope of Work:

- In 2016, evaluate the adopted rule for the inventory and removal of Polychlorinated Biphenyls.

II. Environmental GRC 2016 Cost Estimates

Environmental GRC Polychlorinated Biphenyls Authorization Cost Estimates

	2016	
Project Management Consultant (600 hrs x \$125/hr)	\$	75,000
Total	\$	75,000

III. Key Assumptions/Facts:

- Askeral Polychlorinated Biphenyls have been eliminated from our system.
- All equipment prior to 1979 is assumed to contain Polychlorinated Biphenyls' unless tested and certified.
- There are approximately 162,188 single and three phase distribution transformers in SDG&E's electric system, 21,757 of these transformers were installed prior to 1979 and 24,282 have unknown installation dates. Therefore a total of 46,309 distribution transformers and 44 electrical switches would require testing for Polychlorinated Biphenyls because they were installed prior to 1979 or have unknown installation dates.
- For estimating Polychlorinated Biphenyls levels for all unknown switches and transformers, Polychlorinated Biphenyls distribution data from 3,087 Removed From Service (RFS) transformers in 2009, was utilized. 4% of the equipment removed contained Polychlorinated Biphenyls >50 ppm.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson

Summary of Shared Services Workpapers:

Description	In 2013 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
		2013	2014	2015
A. Hazardous Materials & Waste Management	446	224	224	312
B. Environmental Lab & Site Assessment	1,193	1,245	1,245	1,245
C. Environmental Programs	1,317	1,663	1,743	1,721
D. Policy, Oversight & Compliance Management	1,233	1,337	1,337	1,337
Total	4,189	4,469	4,549	4,615

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Hazardous Materials & Waste Management
 Cost Center: 2100-0206.000

Summary for Category: A. Hazardous Materials & Waste Management

	In 2013\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	381	159	159	159
Non-Labor	65	65	65	153
NSE	0	0	0	0
Total	<u>446</u>	<u>224</u>	<u>224</u>	<u>312</u>
FTE	4.4	1.4	1.4	1.4

Cost Centers belonging to this Category:

2100-0206.000 HAZARDOUS MATERIAL MANAGEMENT

Labor	381	159	159	159
Non-Labor	65	65	65	153
NSE	0	0	0	0
Total	<u>446</u>	<u>224</u>	<u>224</u>	<u>312</u>
FTE	4.4	1.4	1.4	1.4

Note: Totals may include rounding differences.

Beginning of Workpaper
2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Hazardous Materials & Waste Management
 Category-Sub: 1. Hazardous Materials & Waste Management
 Cost Center: 2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT

Activity Description:

The Hazardous Materials and Waste group manages and oversees the hazardous materials and waste operations which include: operation of two Treatment Storage and Disposal Facilities; operation of one Oil/Water Separator; conducting and managing cleanup activities from electrical equipment and company operations with department staff and contracted vendor; and managing the receipt, storage and shipment of hazardous materials and wastes.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast methodology plus incremental upward and downward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a conservative base year level and would not be captured in traditional averaging or trending. Overall, this cost center had a 30% reduction in cost from 2013 to 2016 using our base year forecast methodology.

Non-Labor - Base YR Rec

A base year forecast methodology plus incremental upward and downward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a conservative base year level and would not be captured in traditional averaging or trending. Overall, this cost center had a 30% reduction in cost from 2013 to 2016 using our base year forecast methodology.

NSE - Base YR Rec

A base year forecast methodology plus incremental upward and downward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a conservative base year level and would not be captured in traditional averaging or trending. Overall, this cost center had a 30% reduction in cost from 2013 to 2016 using our base year forecast methodology. Note that there were no NSE adjustments for cost center 2100-0206.000.

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
		2009	2010	2011	2012	2013	2014	2015	2016	
Years										
Labor	472	392	406	385	381	159	159	159		
Non-Labor	56	55	-19	76	65	65	65	153		
NSE	0	0	0	0	0	0	0	0		
Total	529	447	387	461	446	224	224	312		
FTE	5.7	4.7	5.1	4.8	4.4	1.4	1.4	1.4		

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Hazardous Materials & Waste Management
 Category-Sub: 1. Hazardous Materials & Waste Management
 Cost Center: 2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT

Cost Center Allocations (Incurred Costs):

	2013 Adjusted-Recorded					2014 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	0	0	0	0.00	0	0	0	0	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	381	65	0	446	4.42	159	65	0	224	1.42
Total Incurred	381	65	0	446	4.42	159	65	0	224	1.42
% Allocation										
Retained	98.90%	98.90%				98.90%	98.90%			
SEU	1.10%	1.10%				1.10%	1.10%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2015 Adjusted-Forecast					2016 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	0	0	0	0.00	0	88	0	88	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	159	65	0	224	1.42	159	65	0	224	1.42
Total Incurred	159	65	0	224	1.42	159	153	0	312	1.42
% Allocation										
Retained	98.90%	98.90%				98.90%	98.90%			
SEU	1.10%	1.10%				1.10%	1.10%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: A. Hazardous Materials & Waste Management
Category-Sub: 1. Hazardous Materials & Waste Management
Cost Center: 2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2013

This cost center provides supervisory and administrative leadership for Hazardous Materials & Waste department which consists of two SDGE cost centers. The cost center manager and staff in 2100-0206 perform shared duties. The manager is shared based on his/her review of shared services activities for all employees under the manager's supervision. Non-labor expenses are general office support activities such as telephones, cell phones, travel and office supplies which are best allocated on the same basis as labor.

Cost Center Allocation Percentage for 2014

This cost center provides supervisory and administrative leadership for Hazardous Materials & Waste department which consists of two SDGE cost centers. The cost center manager and staff in 2100-0206 perform shared duties. The manager is shared based on his/her review of shared services activities for all employees under the manager's supervision. Non-labor expenses are general office support activities such as telephones, cell phones, travel and office supplies which are best allocated on the same basis as labor.

Cost Center Allocation Percentage for 2015

This cost center provides supervisory and administrative leadership for Hazardous Materials & Waste department which consists of two SDGE cost centers. The cost center manager and staff in 2100-0206 perform shared duties. The manager is shared based on his/her review of shared services activities for all employees under the manager's supervision. Non-labor expenses are general office support activities such as telephones, cell phones, travel and office supplies which are best allocated on the same basis as labor.

Cost Center Allocation Percentage for 2016

This cost center provides supervisory and administrative leadership for Hazardous Materials & Waste department which consists of two SDGE cost centers. The cost center manager and staff in 2100-0206 perform shared duties. The manager is shared based on his/her review of shared services activities for all employees under the manager's supervision. Non-labor expenses are general office support activities such as telephones, cell phones, travel and office supplies which are best allocated on the same basis as labor.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Hazardous Materials & Waste Management
 Category-Sub: 1. Hazardous Materials & Waste Management
 Cost Center: 2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	381	381	381	-222	-222	-222	159	159	159
Non-Labor	Base YR Rec	65	65	65	0	0	88	65	65	153
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		446	446	446	-222	-222	-134	224	224	312
FTE	Base YR Rec	4.4	4.4	4.4	-3.0	-3.0	-3.0	1.4	1.4	1.4

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2014	-222	0	0	-222	-3.0	1-Sided Adj

Labor adjustment for full-year funding.

2014 Total	-222	0	0	-222	-3.0	
-------------------	-------------	----------	----------	-------------	-------------	--

2015	-222	0	0	-222	-3.0	1-Sided Adj
------	------	---	---	------	------	-------------

Labor adjustment for full-year funding.

2015 Total	-222	0	0	-222	-3.0	
-------------------	-------------	----------	----------	-------------	-------------	--

2016	0	88	0	88	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Miramar Treatment Storage & Disposal Facility Permit Renewal: The existing Miramar Treatment, Storage & Disposal Facility Standardized Series B permit is a 10-year permit that expires on August 5, 2017 (Department of Toxic Substances Control Permit #:07-GLN-07 & Facility EPA ID Number CAD 981168107). To implement the permit application process, a consultant is needed to support development of the Treatment, Storage & Disposal Facility permit renewal, associated technical documents, agency meetings and inquiries and public outreach. Cost estimates are based on a consultant proforma estimate and Department of Toxic Substances Control permit fee schedule. The permit development process begins in 2016. See Supplemental Workpapers.

2016	-222	0	0	-222	-3.0	1-Sided Adj
------	------	---	---	------	------	-------------

Labor adjustment for full-year funding.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: A. Hazardous Materials & Waste Management
Category-Sub: 1. Hazardous Materials & Waste Management
Cost Center: 2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2016 Total	-222	88	0	-134	-3.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: A. Hazardous Materials & Waste Management
Category-Sub: 1. Hazardous Materials & Waste Management
Cost Center: 2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	558	561	346	331	329
Non-Labor	54	53	-18	74	65
NSE	0	0	0	0	0
Total	612	614	328	405	394
FTE	7.3	7.5	4.5	4.1	3.8
Adjustments (Nominal \$) **					
Labor	-185	-245	-6	0	0
Non-Labor	-2	-2	0	0	0
NSE	0	0	0	0	0
Total	-187	-247	-6	0	0
FTE	-2.4	-3.5	-0.1	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	374	316	340	331	329
Non-Labor	52	51	-18	74	65
NSE	0	0	0	0	0
Total	425	367	322	405	394
FTE	4.9	4.0	4.4	4.1	3.8
Vacation & Sick (Nominal \$)					
Labor	58	50	50	48	52
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	58	50	50	48	52
FTE	0.8	0.7	0.7	0.7	0.7
Escalation to 2013\$					
Labor	41	26	15	7	0
Non-Labor	5	4	-1	1	0
NSE	0	0	0	0	0
Total	46	30	15	8	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	472	392	406	385	381
Non-Labor	56	55	-19	76	65
NSE	0	0	0	0	0
Total	529	447	387	461	446
FTE	5.7	4.7	5.1	4.8	4.5

* 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
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Hazardous Materials & Waste Management
 Category-Sub: 1. Hazardous Materials & Waste Management
 Cost Center: 2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	-185	-245	-6	0	0
Non-Labor	-2	-2	-0.036	0	0
NSE	0	0	0	0	0
Total	-187	-247	-6	0	0
FTE	-2.4	-3.5	-0.1	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009	-118	-1	0	-1.4	CCTR Transf	To 2200-2176.000	MHARPER20131 113100546697

In early 2011 three employees in cost center 2100-0206 were formally transferred from SDGE to SCG. The FTE calculation is based on hours-time in position at SDGE, the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees. The non-labor for the three employees is spread one-third to each employee for each year and cost center.

2009	-66	-0.661	0	-1.0	CCTR Transf	To 2200-2440.000	MHARPER20131 113102408737
------	-----	--------	---	------	-------------	------------------	------------------------------

In early 2011 three employees in cost center 2100-0206 were formally transferred from SDGE to SCG. The FTE calculation is based on hours-time in position at SDGE, the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees. The non-labor for the three employees is spread one-third to each employee for each year and cost center.

2009 Total	-185	-2	0	-2.4
-------------------	-------------	-----------	----------	-------------

2010	-13	-0.073	0	-0.2	CCTR Transf	To 2200-2370.000	MHARPER20131 113102824720
------	-----	--------	---	------	-------------	------------------	------------------------------

In early 2011 three employees in cost center 2100-0206 were formally transferred from SDGE to SCG. The FTE calculation is based on hours-time in position at SDGE, the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees. The non-labor for the three employees is spread one-third to each employee for each year and cost center.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: A. Hazardous Materials & Waste Management
 Category-Sub: 1. Hazardous Materials & Waste Management
 Cost Center: 2100-0206.000 - HAZARDOUS MATERIAL MANAGEMENT

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From Cctr</u>	<u>RefID</u>
2010	-69	-0.637	0	-1.0	CCTR Transf	To 2200-2443.000	MHARPER20131 113102927073

In early 2011 three employees in cost center 2100-0206 were formally transferred from SDGE to SCG. The FTE calculation is based on hours-time in position at SDGE, the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees. The non-labor for the three employees is spread one-third to each employee for each year and cost center.

2010	-163	-1	0	-2.3	CCTR Transf	To 2200-2370.000	MHARPER20131 113103314673
------	------	----	---	------	-------------	------------------	------------------------------

In early 2011 three employees in cost center 2100-0206 were formally transferred from SDGE to SCG. The FTE calculation is based on hours-time in position at SDGE, the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees. The non-labor for the three employees is spread one-third to each employee for each year and cost center.

2010 Total	-245	-2	0	-3.5			
-------------------	-------------	-----------	----------	-------------	--	--	--

2011	-6	-0.036	0	-0.1	CCTR Transf	To 2200-2443.000	MHARPER20131 113103024703
------	----	--------	---	------	-------------	------------------	------------------------------

In early 2011 three employees in cost center 2100-0206 were formally transferred from SDGE to SCG. The FTE calculation is based on hours-time in position at SDGE, the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring group of employees. The non-labor for the three employees is spread one-third to each employee for each year and cost center.

2011 Total	-6	-0.036	0	-0.1			
-------------------	-----------	---------------	----------	-------------	--	--	--

2012 Total	0	0	0	0.0			
-------------------	----------	----------	----------	------------	--	--	--

2013 Total	0	0	0	0.0			
-------------------	----------	----------	----------	------------	--	--	--

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 2100-0206.000

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: Miramar Treatment, Storage & Disposal Facility Permit Renewal [Cost Center: 2100-0206]

MIRAMAR PERMIT RENEWAL APPLICATION – 2016 FORECAST

	VENDOR/ CONTRACTOR	PROJECT	2016 FORECAST	NOTES
1	Consultant Support			<p>Forecasted costs are based on our environmental consultant's estimates (Haley & Aldrich). Haley & Aldrich has extensive experience with previous Miramar projects and they successfully prepared the Kearny Treatment, Storage & Disposal Facility permit in 2013. In addition, the Miramar facility is permitted for 27 Federal (Resource Conservation and Recovery Act) and 20 State (California Hazardous Waste) waste codes vs. Kearny which is permitted for only 1 Federal (Toxic Substances Control Act/Polychlorinated biphenyls) and 1 State (California Hazardous Waste/Polychlorinated biphenyls) waste codes.</p> <p>Project Scope of Work: Haley & Aldrich will provide consultant support and prepare, review and revise all documents that are required elements of the Department of Toxic Substances Control Standardized Series B Permit Renewal Application for SDG&E Miramar Hazardous Waste Storage Facility and related consultant technical support with Department of Toxic Substances Control (Review & Response) until the Department of Toxic Substances Control permit is issued. Duties include but will not be limited to:</p> <ul style="list-style-type: none"> • Provide regulatory guidance for the content of the permit. • Develop drawings, diagrams and obtaining photos of equipment and storage areas. • Obtaining maps from an outside vendor (Mapping services etc.). • Speaking on SDG&E's behalf with Department of Toxic Substances Control regarding aspects of the permit and our strategy for the facility. • Proof reading the permit content to ensure it meets Department of Toxic Substances Control regulations.
		<i>Prepare Permit Renewal Application</i>	\$50,050	<p>2016 Timeline: January: Start Project September: Final Draft November: Submit Application to Department of Toxic Substances Control</p> <p>Haley & Aldrich will prepare the Permit Renewal Application as outlined in the Project Scope of Work described above. Chief Regulatory Specialist (Grade 9) @ \$180/hr. X 100 hrs. = \$18,000 Senior Professional (Grade 7) @ \$160/hr. X 180 hrs. = \$28,800 Office Support @ \$65/hr. X 50 hrs. = \$3,250</p>
		<i>Certification of Design</i>	\$7,510	<p>2016 1st Quarter: Complete</p> <p>Haley & Aldrich will provide consultant support to prepare <i>Certification of Design</i> for the Permit Renewal Application if needed. Professional Engineer (Grade 8) @ \$160/hr. X 40 hrs. = \$6,400</p>

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: Miramar Treatment, Storage & Disposal Facility Permit Renewal [Cost Center: 2100-0206]

	VENDOR/ CONTRACTOR	PROJECT	2016 FORECAST	NOTES
				Staff Professional (Grade57) @ \$120/hr. X 6 hrs. = \$720 Office Support @ \$65/hr. X 6 hrs. = \$390
2	Department of Toxic Substances Control (Standardized, Series B permit)	Permit Renewal Fee	\$30,385	2016 The Department of Toxic Substances Control fee estimate for the Miramar Treatment, Storage & Disposal Facility Permit Renewal Application (Standardized, Series B permit) is based on the "Permitting Activity Fee" information described in the " Department of Toxic Substances Control Fee Summary " effective January 1, 2013. See also Hazardous Waste Fee Health and Safety Code 25205.7.
	Total		\$87,945	

Note: These costs are not a bid. Costs provided are only estimates based on what is currently known and are subject to change.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. Environmental Lab & Site Assessment
 Cost Center: 2100-0632.000

Summary for Category: B. Environmental Lab & Site Assessment

	In 2013\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	791	839	839	839
Non-Labor	402	406	406	406
NSE	0	0	0	0
Total	1,193	1,245	1,245	1,245
FTE	10.3	10.7	10.7	10.7

Cost Centers belonging to this Category:

2100-0632.000 ENVIRONMENTAL LAB OPERATIONS

Labor	791	839	839	839
Non-Labor	402	406	406	406
NSE	0	0	0	0
Total	1,193	1,245	1,245	1,245
FTE	10.3	10.7	10.7	10.7

Note: Totals may include rounding differences.

Beginning of Workpaper
2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: B. Environmental Lab & Site Assessment
Category-Sub: 1. Environmental Lab & Site Assessment
Cost Center: 2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

Activity Description:

SDG&E operates a California State Certified environmental laboratory that conducts environmental sampling and test analyses for SDG&E. The SDG&E Environmental Analysis Laboratory is certified to test over 500 chemical compounds. The SDG&E Environmental Analysis Laboratory's sampling and test analyses on behalf of SDG&E primarily support SDG&E permitting and compliance, hazardous waste characterization, and predictive and preventative testing for electrical equipment. The SDG&E Environmental Analysis Laboratory & Site Assessment group is responsible for investigation and remediation of contamination at former power plant sites and other former or current operating sites. The group manages complex cleanup projects to obtain "site closure" from governmental agencies that have oversight over the cleanup. The group also pursues cost recovery from government agencies, third parties and insurance companies, when applicable and conducts environmental due diligence for real property transactions (e.g., Phase I and II Environmental Site Assessments). In 2013, the group assumed added responsibility for asbestos program compliance.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast methodology plus incremental upward and downward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a conservative base year level and would not be captured in traditional averaging or trending.

Non-Labor - Base YR Rec

A base year forecast methodology plus incremental upward and downward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a conservative base year level and would not be captured in traditional averaging or trending.

NSE - Base YR Rec

A base year forecast methodology plus incremental upward and downward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a conservative base year level and would not be captured in traditional averaging or trending. Note that there were no NSE adjustments for cost center 2100-0632.000.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. Environmental Lab & Site Assessment
 Category-Sub: 1. Environmental Lab & Site Assessment
 Cost Center: 2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2009	2010	2011	2012	2013	2014	2015	2016	
Labor		778	816	794	791	791	839	839	839	
Non-Labor		505	565	460	391	402	406	406	406	
NSE		0	0	0	0	0	0	0	0	
Total		1,282	1,381	1,254	1,182	1,193	1,245	1,245	1,245	
FTE		10.4	10.7	10.5	10.4	10.3	10.7	10.7	10.7	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. Environmental Lab & Site Assessment
 Category-Sub: 1. Environmental Lab & Site Assessment
 Cost Center: 2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

Cost Center Allocations (Incurred Costs):

	2013 Adjusted-Recorded					2014 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	2	6	0	8	0.00	2	6	0	8	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	789	396	0	1,185	10.29	837	400	0	1,237	10.69
Total Incurred	791	402	0	1,193	10.29	839	406	0	1,245	10.69
% Allocation										
Retained	96.50%	96.50%				96.50%	96.50%			
SEU	3.50%	3.50%				3.50%	3.50%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2015 Adjusted-Forecast					2016 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	2	6	0	8	0.00	2	6	0	8	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	837	400	0	1,237	10.69	837	400	0	1,237	10.69
Total Incurred	839	406	0	1,245	10.69	839	406	0	1,245	10.69
% Allocation										
Retained	96.50%	96.50%				96.50%	96.50%			
SEU	3.50%	3.50%				3.50%	3.50%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: B. Environmental Lab & Site Assessment
Category-Sub: 1. Environmental Lab & Site Assessment
Cost Center: 2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2013

The Environmental Lab performs a broad spectrum of environmental and chemical sampling, testing, and analysis for operational maintenance and regulatory compliance. The work performed for SCG is part of the Waste Discharge Requirements (WDRs) of the California Regional Water Quality Control Board (CRWQCB) for the gas compressor stations at Newberry Springs, North Needles, South Needles, and Blythe. As part of the requirements we need to retrieve, sample, and test well water quality of the discharge and/or any ground water wells and submit quarterly compliance reports to the local CRWQCB. Management reviewed the annual workload distribution costs to determine the allocation ratios between SDGE and SCG based upon the annual volume of analyses performed for each company.

Cost Center Allocation Percentage for 2014

The Environmental Lab performs a broad spectrum of environmental and chemical sampling, testing, and analysis for operational maintenance and regulatory compliance. The work performed for SCG is part of the Waste Discharge Requirements (WDRs) of the California Regional Water Quality Control Board (CRWQCB) for the gas compressor stations at Newberry Springs, North Needles, South Needles, and Blythe. As part of the requirements we need to retrieve, sample, and test well water quality of the discharge and/or any ground water wells and submit quarterly compliance reports to the local CRWQCB. Management reviewed the annual workload distribution costs to determine the allocation ratios between SDGE and SCG based upon the annual volume of analyses performed for each company.

Cost Center Allocation Percentage for 2015

The Environmental Lab performs a broad spectrum of environmental and chemical sampling, testing, and analysis for operational maintenance and regulatory compliance. The work performed for SCG is part of the Waste Discharge Requirements (WDRs) of the California Regional Water Quality Control Board (CRWQCB) for the gas compressor stations at Newberry Springs, North Needles, South Needles, and Blythe. As part of the requirements we need to retrieve, sample, and test well water quality of the discharge and/or any ground water wells and submit quarterly compliance reports to the local CRWQCB. Management reviewed the annual workload distribution costs to determine the allocation ratios between SDGE and SCG based upon the annual volume of analyses performed for each company.

Cost Center Allocation Percentage for 2016

The Environmental Lab performs a broad spectrum of environmental and chemical sampling, testing, and analysis for operational maintenance and regulatory compliance. The work performed for SCG is part of the Waste Discharge Requirements (WDRs) of the California Regional Water Quality Control Board (CRWQCB) for the gas compressor stations at Newberry Springs, North Needles, South Needles, and Blythe. As part of the requirements we need to retrieve, sample, and test well water quality of the discharge and/or any ground water wells and submit quarterly compliance reports to the local CRWQCB. Management reviewed the annual workload distribution costs to determine the allocation ratios between SDGE and SCG based upon the annual volume of analyses performed for each company.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. Environmental Lab & Site Assessment
 Category-Sub: 1. Environmental Lab & Site Assessment
 Cost Center: 2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	791	791	791	48	48	48	839	839	839
Non-Labor	Base YR Rec	402	402	402	4	4	4	406	406	406
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		1,193	1,193	1,193	52	52	52	1,245	1,245	1,245
FTE	Base YR Rec	10.3	10.3	10.3	0.4	0.4	0.4	10.7	10.7	10.7

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2014	0	-9	0	-9	0.0	1-Sided Adj

Hydrogen Generator - Helium and Hydrogen Gas Savings: The implementation of a hydrogen generator will reduce SDG&E's Environmental laboratory material expenses for purchase of compressed helium and hydrogen used as a laboratory analytical instrument carrier gas by an estimated \$9.3k per year. Some helium compressed gas purchases will remain.

Methodology: The cost reduction estimate for helium and hydrogen compressed gas cylinders is based on the number and cost of cylinders replaced by the new Hydrogen Generator. See Supplemental Workpapers.

2014	48	0	0	48	0.4	1-Sided Adj
------	----	---	---	----	-----	-------------

Labor adjustment for full-year funding.

2014	0	13	0	13	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Site Assessment and Mitigation Operations and Maintenance Costs: The Hazardous Substance Cleanup Cost Account provides a methodology for allocating costs and related recoveries associated with covered hazardous substance related activities. The costs include Operating and Maintenance Costs for the first 10 years following inclusion of a site under the Definition of Covered Hazardous Substance Cleanup Costs. After Year 10, the costs covered by the Hazardous Substance Cleanup Cost Account will be shifted to standard Operating and Maintenance cost accounts for Environmental Services. Two sites, Solana Beach Burn Site and Kearny, have reached the 10 year mark. See Supplemental Workpapers.

2014 Total	48	4	0	52	0.4	
-------------------	-----------	----------	----------	-----------	------------	--

2015	0	-9	0	-9	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. Environmental Lab & Site Assessment
 Category-Sub: 1. Environmental Lab & Site Assessment
 Cost Center: 2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
-------------------	--------------	-------------	------------	--------------	------------	-----------------

Hydrogen Generator - Helium and Hydrogen Gas Savings: The implementation of a hydrogen generator will reduce SDG&E's Environmental laboratory material expenses for purchase of compressed helium and hydrogen used as a laboratory analytical instrument carrier gas by an estimated \$9.3k per year. Some helium compressed gas purchases will remain.

Methodology: The cost reduction estimate for helium and hydrogen compressed gas cylinders is based on the number and cost of cylinders replaced by the new Hydrogen Generator. See Supplemental Workpapers.

2015	48	0	0	48	0.4	1-Sided Adj
------	----	---	---	----	-----	-------------

Labor adjustment for full-year funding.

2015	0	13	0	13	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Site Assessment and Mitigation Operations and Maintenance Costs: The Hazardous Substance Cleanup Cost Account provides a methodology for allocating costs and related recoveries associated with covered hazardous substance related activities. The costs include Operating and Maintenance Costs for the first 10 years following inclusion of a site under the Definition of Covered Hazardous Substance Cleanup Costs. After Year 10, the costs covered by the Hazardous Substance Cleanup Cost Account will be shifted to standard Operating and Maintenance cost accounts for Environmental Services. Two sites, Solana Beach Burn Site and Kearny, have reached the 10 year mark. See Supplemental Workpapers.

2015 Total	48	4	0	52	0.4	
-------------------	-----------	----------	----------	-----------	------------	--

2016	0	-9	0	-9	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Hydrogen Generator - Helium and Hydrogen Gas Savings: The implementation of a hydrogen generator will reduce SDG&E's Environmental laboratory material expenses for purchase of compressed helium and hydrogen used as a laboratory analytical instrument carrier gas by an estimated \$9.3k per year. Some helium compressed gas purchases will remain.

Methodology: The cost reduction estimate for helium and hydrogen compressed gas cylinders is based on the number and cost of cylinders replaced by the new Hydrogen Generator. See Supplemental Workpapers.

2016	48	0	0	48	0.4	1-Sided Adj
------	----	---	---	----	-----	-------------

Labor adjustment for full-year funding.

2016	0	13	0	13	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
 2016 GRC - APP
 Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. Environmental Lab & Site Assessment
 Category-Sub: 1. Environmental Lab & Site Assessment
 Cost Center: 2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
-------------------	--------------	-------------	------------	--------------	------------	-----------------

Site Assessment and Mitigation Operations and Maintenance Costs: The Hazardous Substance Cleanup Cost Account provides a methodology for allocating costs and related recoveries associated with covered hazardous substance related activities. The costs include operating and maintenance costs for the first 10 years following inclusion of a site under the definition of covered hazardous substance cleanup costs. After year 10, the costs covered by the Hazardous Substance Cleanup Cost Account will be shifted to standard operating and maintenance cost accounts for Environmental Services. Two sites, Solana Beach Burn Site and Kearny, have reached the 10 year mark. See Supplemental Workpapers.

2016 Total	48	4	0	52	0.4	
-------------------	-----------	----------	----------	-----------	------------	--

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. Environmental Lab & Site Assessment
 Category-Sub: 1. Environmental Lab & Site Assessment
 Cost Center: 2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	615	657	666	679	683
Non-Labor	461	528	443	384	402
NSE	0	0	0	0	0
Total	1,076	1,185	1,109	1,063	1,084
FTE	8.9	9.2	9.0	9.0	8.8
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	615	657	666	679	683
Non-Labor	461	528	443	384	402
NSE	0	0	0	0	0
Total	1,076	1,185	1,109	1,063	1,084
FTE	8.9	9.2	9.0	9.0	8.8
Vacation & Sick (Nominal \$)					
Labor	95	105	98	98	108
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	95	105	98	98	108
FTE	1.5	1.6	1.5	1.4	1.5
Escalation to 2013\$					
Labor	67	54	30	13	0
Non-Labor	44	37	17	7	0
NSE	0	0	0	0	0
Total	111	91	47	20	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	778	816	794	791	791
Non-Labor	505	565	460	391	402
NSE	0	0	0	0	0
Total	1,282	1,381	1,254	1,182	1,193
FTE	10.4	10.8	10.5	10.4	10.3

* 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
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: B. Environmental Lab & Site Assessment
 Category-Sub: 1. Environmental Lab & Site Assessment
 Cost Center: 2100-0632.000 - ENVIRONMENTAL LAB OPERATIONS

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009 Total	0	0	0	0.0			
2010 Total	0	0	0	0.0			
2011 Total	0	0	0	0.0			
2012 Total	0	0	0	0.0			
2013 Total	0	0	0	0.0			

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 2100-0632.000

Supplemental Workpaper: Site Assessment and Mitigation Operations and Maintenance Costs [Cost Center: 2100-0632]

The Solana Beach Burn Site and Kearny are the two sites that will be transitioning from the Hazardous Substance Cleanup Cost Account to standard Operating and Maintenance cost accounts in 2014. The operating and maintenance costs for the sites include annual inspections, sump maintenance, paving maintenance, vector control, best management practices annual maintenance, hydroseeding, and security fence maintenance.

	Total Expected Costs per Year					
	2014		2015		2016	
Solana Beach Burn Site	\$	4,409	\$	4,409	\$	4,409
Kearny	\$	9,069	\$	9,069	\$	9,069
	\$	13,478	\$	13,478	\$	13,478

Cost Estimate for Solana Beach Burn Site:

Activity	Unit Cost	Total Annual Units	Total Annual Cost	GRC		
				2014	2015	2016
Vector Control	\$80/month	12	\$ 960	\$ 960	\$ 960	\$ 960
Best Management Practices	\$900/year	1	\$ 900	\$ 900	\$ 900	\$ 900
Security Fence ¹	\$1,150/year	1	\$ 1,150	\$ 1,150	\$ 1,150	\$ 1,150
Hydroseeding ²	\$1,399/year	1	\$ 1,399	\$ 1,399	\$ 1,399	\$ 1,399
Total \$			\$ 4,409	\$ 4,409	\$ 4,409	\$ 4,409

¹ Annual maintenance costs for the security fence are calculated by amortizing the cost of the fence at \$23,000 over

² Required for an additional 5 years or until coverage is sufficient to eliminate erosion.

Cost Estimate for Kearny:

Activity	GRC		
	2014	2015	2016
Annual Sump Inspection	\$ 4,303	\$ 4,303	\$ 4,303
Annual Asphalt Inspection	\$ 120	\$ 120	\$ 120
Annual Land Use Covenant Certification	\$ 1,584	\$ 1,584	\$ 1,584
Annual Sump Maintenance/ Repair	\$ 731	\$ 731	\$ 731
Annual Paving Maintenance/ Repair (Approximate Area = 40,000 SF)	\$ 1,629	\$ 1,629	\$ 1,629
Contingency (10%)	\$ 702	\$ 702	\$ 702
Total \$	\$ 9,069	\$ 9,069	\$ 9,069

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: Hydrogen Generator - Helium and Hydrogen Gas Savings [Cost Center: 2100-0632]

SDG&E Environmental Laboratory Compressed Gas Helium and Hydrogen Consumption

Below is a summary table of the number of helium and hydrogen compressed gas cylinders used with analytical instruments by area within the SDG&E Environmental Laboratory during 2012. The Hydrogen Generator will replace cylinders used in Areas 1 and 5. (Hydrogen and helium cylinders in Areas 2, 3 and 4 cannot be replaced by the Hydrogen Generator at this time due to logistics and instrument constraints.)

2012	Area 1* Helium	Area 1 Hydrogen	Area 2* Helium	Area 3* Helium	Area 4* Helium	Area 5* Helium
Jan	1	1	0	0	1	3
Feb	2	2	0	0	0	3
Mar	2	1	1	1	0	2
Apr	2	2	0	0	1	0
May	2	2	0	0	1	0
Jun	1	1	1	1	0	0
Jul	2	2	0	0	0	0
Aug	2	1	1	0	0	0
Sep	2	2	0	1	1	0
Oct	2	1	1	0	0	0
Nov	2	2	1	0	0	1
Dec	3	1	0	1	1	0
Total cylinders per area	23	18	5	4	5	9

For Areas 1 and 5:

	# Cylinders	Unit Price	Total Price
Total projected Helium cylinders replaced by Hydrogen Generator (23 + 9 = 32 cylinders):	32	\$ 253.96	\$ 8,126.72
Total projected Hydrogen cylinders replaced by Hydrogen Generator (18 cylinders in Area 1):	18	\$ 67.78	\$ 1,220.04

Total Annual Savings =

\$ 9,346.76

* Note:

Area 1 is also known as the "GC Hallway" area

Area 2 is also known as the "Carle" area

Area 3 is also known as the "Semi" area

Area 4 is also known as the "VOA" area

Area 5 is also known as the "IC" area

Note: Analysis is for cylinder purchases during calendar year 2012.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: Hydrogen Generator - Helium and Hydrogen Gas Savings [Cost Center: 2100-0632]

Yousef, Crystal

From: OrderConfirm@praxair.com
Sent: Tuesday, October 22, 2013 12:01 PM
To: Yousef, Crystal
Subject: Praxair USA E-Commerce Order Confirmation

Praxair USA has received the following order:

Reference number: 249432
Region: GNA
Region name: Praxair USA
Customer number : EP584
Customer name : SDG&E *MS*
Username : cyousef
P/O Number : 3860027110
Order Type : Gas Order

Qty	Price	Item	Description
1	\$253.96	HE 5.0UH-T	HELIUM 99.999% UHP T

Shipping Information:

SDG&E ENVIRONMENTAL LAB *MS*
6555 NANCY RIDGE DR
STE 300
SAN DIEGO, CA 921210000
ShipVia: OUR TRUCK

Shipping Notes:

Praxair online ordering info:
Cost Center 2100-0632
Crystal Yousef - Emp # 03103
Phone # 858-503-5371

Thank you for shopping with Praxair USA

Final order availability and prices, including freight and tax, are subject to change.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: Hydrogen Generator - Helium and Hydrogen Gas Savings [Cost Center: 2100-0632]

Yousef, Crystal

From: OrderConfirm@praxair.com
Sent: Wednesday, July 24, 2013 1:09 PM
To: Yousef, Crystal
Subject: Praxair USA E-Commerce Order Confirmation

Praxair USA has received the following order:

Reference number: 240713
Region: GNA
Region name: Praxair USA
Customer number : EP584
Customer name : SDG&E *MS*
Username : cyousef
P/O Number : 3860027110
Order Type : Gas Order

Qty	Price	Item	Description
1	\$67.78	HY 5.0UH-T	HYDROGEN 99.999% UHP T
1	\$69.00	AR 5.0UH-T	ARGON 99.999% UHP T

Shipping Information:

SDG&E ENVIRONMENTAL LAB *MS*
6555 NANCY RIDGE DR
STE 300
SAN DIEGO, CA 921210000
ShipVia: OUR TRUCK

Shipping Notes:
Praxair online ordering info:
Cost Center 2100-0632
Crystal Yousef - Emp # 03103
Phone # 858-503-5371

Thank you for shopping with Praxair USA

Final order availability and prices, including freight and tax, are subject to change.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: Hydrogen Generator - Helium and Hydrogen Gas Savings [Cost Center: 2100-0632]



Environmental Analysis Lab
6555 Nancy Ridge Dr. Ste #300
San Diego, CA 92121

Date: 7-24-13

To: Praxair

From: IC Garnett

Fax: 619-232-4011
Phone: 619-232-7341
Contact: Cylinder Oder Dept.
PO # 3860027110- Account # EP584
Cost Center - 2100-0632

Fax: 858-503-5398
Phone: 858-503-5371
Contact: Crystal Yousef - Emp # 03103

Please Order

Helium 300cu ft.
99.999%

HE 5.0UH-T

Extra Dry Air

AI 0.0XD-T

Nitrogen
99.999%

NI 5.0UH-T

Nitrogen
Industrial

NI T

Hydrogen
99.999%

HY 5.0UH-T

Argon
99.999%

AR 5.0UH-T

Argon Dewer
GP45

AR LC160-230

Online Order Form

S:\LAB Non-records\OFFICE\Cylinder Online Praxair Order Form.docx

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: C. Environmental Programs
Cost Center: 2100-3022.000

Summary for Category: C. Environmental Programs

	In 2013\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	757	923	969	969
Non-Labor	559	739	773	751
NSE	0	0	0	0
Total	1,316	1,662	1,742	1,720
FTE	9.2	11.2	11.8	11.8

Cost Centers belonging to this Category:

2100-3022.000 ENVIRONMENTAL PROGRAMS SDGE

Labor	757	923	969	969
Non-Labor	559	739	773	751
NSE	0	0	0	0
Total	1,316	1,662	1,742	1,720
FTE	9.2	11.2	11.8	11.8

Note: Totals may include rounding differences.

Beginning of Workpaper
2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: C. Environmental Programs
 Category-Sub: 1. Environmental Programs
 Cost Center: 2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

Activity Description:

The Environmental Programs group includes subject matter experts in air and water quality, biological resources, cultural resources, land planning and hazardous materials and waste. The group supports ongoing environmental compliance, including obtaining environmental permits and approvals, developing environmental plans and conducting specialized environmental training. The group also screens proposed facility, field and real property projects and transactions that have the potential for environmental impacts. This environmental screening involves a thorough review and analysis of potential environmental impacts, permits and compliance requirements for all environmental disciplines, as appropriate for the project scope. In 2013, the group assumed the development and management for the content of all environmental compliance procedures.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a conservative base year level and would not be captured in traditional averaging or trending.

Non-Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a conservative base year level and would not be captured in traditional averaging or trending.

NSE - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. The specific cost drivers are best applied to a conservative base year level and would not be captured in traditional averaging or trending. Note that there were no NSE adjustments for cost center 2100-3022.000.

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years	2009	2010	2011	2012	2013	2014	2015	2016		
Labor	903	869	707	842	757	923	969	969		
Non-Labor	533	685	415	421	559	739	773	751		
NSE	0	0	0	0	0	0	0	0		
Total	1,436	1,554	1,122	1,263	1,317	1,663	1,743	1,721		
FTE	10.2	10.3	8.3	10.0	9.2	11.2	11.8	11.8		

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: C. Environmental Programs
 Category-Sub: 1. Environmental Programs
 Cost Center: 2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

Cost Center Allocations (Incurred Costs):

	2013 Adjusted-Recorded					2014 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	59	329	0	388	0.75	59	509	0	568	0.75
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	698	230	0	928	8.42	864	230	0	1,094	10.42
Total Incurred	757	559	0	1,316	9.17	923	739	0	1,662	11.17
% Allocation										
Retained	99.80%	99.80%				99.80%	99.80%			
SEU	0.20%	0.20%				0.20%	0.20%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2015 Adjusted-Forecast					2016 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	105	543	0	648	1.35	105	521	0	626	1.35
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	864	230	0	1,094	10.42	864	230	0	1,094	10.42
Total Incurred	969	773	0	1,742	11.77	969	751	0	1,720	11.77
% Allocation										
Retained	99.80%	99.80%				99.80%	99.80%			
SEU	0.20%	0.20%				0.20%	0.20%			
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 2013

This shared service percentage is a collective average of time dedicated to each company resulting from a labor review for each employee in this cost center.

Cost Center Allocation Percentage for 2014

This shared service percentage is a collective average of time dedicated to each company resulting from a labor review for each employee in this cost center.

Cost Center Allocation Percentage for 2015

This shared service percentage is a collective average of time dedicated to each company resulting from a labor review for each employee in this cost center.

Cost Center Allocation Percentage for 2016

This shared service percentage is a collective average of time dedicated to each company resulting from a labor review for each employee in this cost center.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: C. Environmental Programs
 Category-Sub: 1. Environmental Programs
 Cost Center: 2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	757	757	757	166	212	212	923	969	969
Non-Labor	Base YR Rec	559	559	559	180	214	192	739	773	751
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		1,317	1,317	1,317	346	426	404	1,663	1,743	1,721
FTE	Base YR Rec	9.2	9.2	9.2	2.0	2.6	2.6	11.2	11.8	11.8

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2014	0	8	0	8	0.0	1-Sided Adj

State Water Resources Control Board Discharge Permit (Natural Gas): SDG&E, in partnership with other California natural gas utilities (SCG and PG&E), will share costs to develop State Water Resources Control Board (SWRCB) programmatic permits to address water discharges that occur on natural gas utility facilities during construction, operation and maintenance. The programmatic natural gas facility-related discharge permit(s) would streamline SDG&E's permitting process, reduce delays and establish uniform compliance requirements. Costs are to fund third party consultants to develop statewide programmatic discharge permit(s) for these utilities for construction and maintenance work. See Supplemental Workpapers.

2014	0	64	0	64	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Vault De-watering Permit Renewal: Renewal of the General National Pollutant Discharge Elimination System Permit for discharges from utility vaults and underground structures to surface water (#ORDER NO. 2006-0008-DWQ/#NPDES NO. CAG990002A) is anticipated to be adopted and implemented after late 2014. SDG&E is required to address projected new requirements that includes development or modification of the Pollution Prevention Plan, development of the two Special Study work plans, field work that includes routine monitoring and Special Study monitoring, reporting, and additional sampling. See Supplemental Workpaper.

2014	166	0	0	166	2.0	1-Sided Adj
------	-----	---	---	-----	-----	-------------

Labor adjustment for full-year funding.

2014	0	10	0	10	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Green House Gas Reporting Support: Consultant to review annual report results prior to submittal to agencies. \$125 per hour x 80 hrs = \$10,000

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: C. Environmental Programs
 Category-Sub: 1. Environmental Programs
 Cost Center: 2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2014	0	33	0	33	0.0	1-Sided Adj

State Water Resources Control Board Industrial Stormwater Permit Update: The Industrial Stormwater Permit is a General National Pollutant Discharge Elimination System Permit that regulates discharges associated with 10 broad categories of industrial activities. The permit was adopted on April 1, 2014 and will be enforced starting July 1, 2015. SDG&E has three facilities (Palomar, Kearny, and Miramar) that are subject to the requirements of the Industrial Stormwater Permit. The proposed final changes to the permit will require SDG&E to amend the facilities' Storm Water Pollution Prevention Plans, increase the sampling and testing frequencies at each of the facilities, and provide additional reporting to the State Water Resources Control Board. See Supplemental Workpapers.

2014	0	65	0	65	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

SDG&E Greenhouse Gas Reporting Procedures Matrix: The development of Greenhouse Gas Reporting Procedures Matrix by a consultant that identifies the various operational data sources, company contacts, workflows and Greenhouse Gas calculations (for each applicable Subpart), and protocols for California Air Resources Board, Environmental Protection Agency, and The Climate Registry reporting. The matrix will assist, on an interim basis, in making the reporting process more efficient until a new Greenhouse Gas and Environmental Sustainability Management Tool is developed and implemented. \$150 x 430 hours = \$64,500.

2014 Total	166	180	0	346	2.0	
-------------------	------------	------------	----------	------------	------------	--

2015	0	8	0	8	0.0	1-Sided Adj
------	---	---	---	---	-----	-------------

State Water Resources Control Board Discharge Permit (Natural Gas): SDG&E, in partnership with other California natural gas utilities (SCG and PG&E), will share costs to develop State Water Resources Control Board (SWRCB) programmatic permits to address water discharges that occur on natural gas utility facilities during construction, operation and maintenance. The programmatic natural gas facility-related discharge permit(s) would streamline SDG&E's permitting process, reduce delays and establish uniform compliance requirements. Costs are to fund third party consultants to develop statewide programmatic discharge permit(s) for these utilities for construction and maintenance work. See Supplemental Workpapers.

2015	0	34	0	34	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: C. Environmental Programs
 Category-Sub: 1. Environmental Programs
 Cost Center: 2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
Vault De-watering Permit Renewal: Renewal of the General National Pollutant Discharge Elimination System Permit for discharges from utility vaults and underground structures to surface water (#ORDER NO. 2006-0008-DWQ/#NPDES NO. CAG990002A) is anticipated to be adopted and implemented after late 2014. SDG&E is required to address projected new requirements that includes development or modification of the Pollution Prevention Plan, development of the two Special Study work plans, field work that includes routine monitoring and Special Study monitoring, reporting, and additional sampling. See Supplemental Workpaper.						
2015	23	0	0	23	0.3	1-Sided Adj
Cultural Resources Support: 1 Full-Time Employee add: Need to add an Archaeologist to support Cultural and Paleontological reviews for utility projects. [\$90k x 25% O&M = \$22.5k]						
2015	23	0	0	23	0.3	1-Sided Adj
Natural Resources Support: 1 Full-Time Employee add: Need to add a Biologist to support Biological review for utility projects. [\$90k x 25% O&M = \$22.5k]						
2015	166	0	0	166	2.0	1-Sided Adj
Labor adjustment for full-year funding.						
2015	0	147	0	147	0.0	1-Sided Adj
State Water Resources Control Board Programmatic 401 Certification for Linear Projects: SDG&E, in partnership with other California companies, will share costs to develop a State Water Resources Control Board (SWRCB) Programmatic Section 401 Water Quality Certification (WQC) and Waste Discharge Requirements (WDRs) to address impacts to waterways that occur on linear underground/ overhead projects (LUPs) during construction, operation and maintenance. Programmatic Section 401 WQC and WDRs would streamline SDG&E's permitting process, reduce delays and establish uniform compliance requirements. Costs are to fund third party consultants to develop a statewide, programmatic WQC and WDRs for construction and maintenance work on LUPs. See Supplemental Workpapers.						
2015	0	10	0	10	0.0	1-Sided Adj
Green House Gas Reporting Support: Consultant to review annual report results prior to submittal to agencies. \$125 per hour x 80 hrs = \$10,000						
2015	0	15	0	15	0.0	1-Sided Adj

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: C. Environmental Programs
 Category-Sub: 1. Environmental Programs
 Cost Center: 2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
-------------------	--------------	-------------	------------	--------------	------------	-----------------

State Water Resources Control Board Industrial Stormwater Permit Update: The Industrial Stormwater Permit is a General National Pollutant Discharge Elimination System Permit that regulates discharges associated with 10 broad categories of industrial activities. The permit was adopted on April 1, 2014 and will be enforced starting July 1, 2015. SDG&E has three facilities (Palomar, Kearny, and Miramar) that are subject to the requirements of the Industrial Stormwater Permit. The proposed final changes to the permit will require SDG&E to amend the facilities' Storm Water Pollution Prevention Plans, increase the sampling and testing frequencies at each of the facilities, and provide additional reporting to the State Water Resources Control Board. See Supplemental Workpapers.

2015 Total	212	214	0	426	2.6	
-------------------	------------	------------	----------	------------	------------	--

2016	0	15	0	15	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

State Water Resources Control Board Industrial Stormwater Permit Update: The Industrial Stormwater Permit is a General National Pollutant Discharge Elimination System Permit that regulates discharges associated with 10 broad categories of industrial activities. The permit was adopted on April 1, 2014 and will be enforced starting July 1, 2015. SDG&E has three facilities (Palomar, Kearny, and Miramar) that are subject to the requirements of the Industrial Stormwater Permit. The proposed final changes to the permit will require SDG&E to amend the facilities' Storm Water Pollution Prevention Plans, increase the sampling and testing frequencies at each of the facilities, and provide additional reporting to the State Water Resources Control Board. See Supplemental Workpapers.

2016	0	20	0	20	0.0	1-Sided Adj
------	---	----	---	----	-----	-------------

Vault De-watering Permit Renewal: Renewal of the General National Pollutant Discharge Elimination System Permit for discharges from utility vaults and underground structures to surface water (#ORDER NO. 2006-0008-DWQ/#NPDES NO. CAG990002A) is anticipated to be adopted and implemented after late 2014. SDG&E is required to address projected new requirements that includes development or modification of the Pollution Prevention Plan, development of the two Special Study work plans, field work that includes routine monitoring and Special Study monitoring, reporting, and additional sampling. See Supplemental Workpaper.

2016	23	0	0	23	0.3	1-Sided Adj
------	----	---	---	----	-----	-------------

Cultural Resources Support: 1 Full-Time Employee add: Need to add an Archaeologist to support Cultural and Paleontological reviews for utility projects. [\$90k x 25% O&M = \$22.5k]

2016	23	0	0	23	0.3	1-Sided Adj
------	----	---	---	----	-----	-------------

Natural Resources Support: 1 Full-Time Employee add: Need to add a Biologist to support Biological review for utility projects. [\$90k x 25% O&M = \$22.5k]

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: C. Environmental Programs
 Category-Sub: 1. Environmental Programs
 Cost Center: 2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2016	166	0	0	166	2.0	1-Sided Adj
Labor adjustment for full-year funding.						
2016	0	147	0	147	0.0	1-Sided Adj
State Water Resources Control Board Programmatic 401 Certification for Linear Projects: SDG&E, in partnership with other California companies, will share costs to develop a State Water Resources Control Board (SWRCB) Programmatic Section 401 Water Quality Certification (WQC) and Waste Discharge Requirements (WDRs) to address impacts to waterways that occur on linear underground/ overhead projects (LUPs) during construction, operation and maintenance. Programmatic Section 401 WQC and WDRs would streamline SDG&E's permitting process, reduce delays and establish uniform compliance requirements. Costs are to fund third party consultants to develop a statewide, programmatic WQC and WDRs for construction and maintenance work on LUPs. See Supplemental Workpapers.						
2016	0	10	0	10	0.0	1-Sided Adj
Green House Gas Reporting Support: Consultant to review annual report results prior to submittal to agencies. \$125 per hour x 80 hrs = \$10,000						
2016 Total	212	192	0	404	2.6	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: C. Environmental Programs
 Category-Sub: 1. Environmental Programs
 Cost Center: 2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	714	700	593	723	654
Non-Labor	487	640	400	414	559
NSE	0	0	0	0	0
Total	1,201	1,340	993	1,137	1,213
FTE	8.8	8.8	7.1	8.6	7.8
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	714	700	593	723	654
Non-Labor	487	640	400	414	559
NSE	0	0	0	0	0
Total	1,201	1,340	993	1,137	1,213
FTE	8.8	8.8	7.1	8.6	7.8
Vacation & Sick (Nominal \$)					
Labor	110	111	87	105	104
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	110	111	87	105	104
FTE	1.5	1.5	1.2	1.4	1.4
Escalation to 2013\$					
Labor	78	57	27	14	0
Non-Labor	46	45	16	7	0
NSE	0	0	0	0	0
Total	124	103	42	21	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	903	869	707	842	757
Non-Labor	533	685	415	421	559
NSE	0	0	0	0	0
Total	1,436	1,554	1,122	1,263	1,317
FTE	10.3	10.3	8.3	10.0	9.2

* 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.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: C. Environmental Programs
 Category-Sub: 1. Environmental Programs
 Cost Center: 2100-3022.000 - ENVIRONMENTAL PROGRAMS SDGE

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009 Total	0	0	0	0.0			
2010 Total	0	0	0	0.0			
2011 Total	0	0	0	0.0			
2012 Total	0	0	0	0.0			
2013 Total	0	0	0	0.0			

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 2100-3022.000

Supplemental Workpaper: State Water Resources Control Board Industrial Stormwater Permit Update [Cost Center: 2100-3022]

The Industrial Stormwater Permit is a General National Pollutant Discharge Elimination System Permit that regulates discharges associated with 10 broad categories of industrial activities. The permit was adopted on April 1, 2014. SDG&E has three facilities (Palomar, Kearny, and Miramar) that are subject to the requirements of the Industrial Stormwater Permit. The proposed final changes to the permit will require SDG&E to amend the facilities' Storm Water Pollution Prevention Plans, increase the sampling and testing frequencies at each of the facilities, and provide additional reporting to the State Water Resources Control Board.

	Total Expected Costs per Year		
	Year 2014	Year 2015	Year 2016
Pre-Construction Activities	\$ 15,300		
Qualified Industrial Storm Water Pollution Prevention Plan Practioner Certifications	\$ 2,400		
Construction Support	\$ 15,444	\$ 15,444	\$ 15,444
Total	\$ 33,144	\$ 15,444	\$ 15,444

Pre-Construction Activities

Cost estimate (and cover email) for implementation of the updated Industrial Stormwater Permit provided by NV5 Consulting) includes a total of estimated costs associated with pre-construction activities (i.e. work such as compilation of Storm Water Pollution Prevention Plans and field surveys) for the three facilities, totaling \$15,300 in 2014. This is not a recurring cost in 2015 or 2016.

	Total Expected Costs per Year		
	Year 2014	Year 2015	Year 2016
Storm Water Pollution Prevention Plans	\$ 13,500	\$ -	\$ -
Field Surveys	\$ 1,800		
Total	\$ 15,300	\$ -	\$ -

The new Permit requires an assigned Qualified Industrial Storm Water Pollution Prevention Plan Practioner (QISP) at each site. The training/certification requirements for a Qualified Industrial Storm Water Pollution Prevention Plan Practioner (QISP) have not been provided by the State Board at this time. Costs for a Qualified Industrial Storm Water Pollution Prevention Plan Practioner (QISP) have been approximated by using training/certification costs for a Qualified Storm Water Pollution Prevention Plan Practioner (QSP) for the Construction General Permit. Training costs are \$675 per Qualified Industrial Storm Water Pollution Prevention Plan Practioner (QISP). In addition to training, California Stormwater Quality Association does charge a certification fee for each Qualified Industrial Storm Water Pollution

Supplemental Workpaper: State Water Resources Control Board Industrial Stormwater Permit Update [Cost Center: 2100-3022]

Prevention Plan Practitioner (QISP). The fee is estimated to be \$125 (based on the fee charged for a Qualified Storm Water Pollution Prevention Plan Practitioner (QSP) for the Construction General Permit, see link below).

<https://www.casqa.org/TrainingandEducation/ConstructionGeneralPermitTraining/CPGTrainingforQSDandQSP/tabid/208/Default.aspx>

	Total Expected Costs per Year					
	Year 2014		Year 2015		Year 2016	
<i>Qualified Industrial Storm Water Pollution Prevention Plan Practitioner Certifications</i>						
Palomar Facility	\$	800	\$	-	\$	-
Kearny Facility	\$	800	\$	-	\$	-
Miramar Facility	\$	800	\$	-	\$	-
Total	\$	2,400	\$	-	\$	-

Construction Activities

Inspections: The existing Permit requires visual inspections of Best Management Practices and drainage areas once a quarter for each site (i.e. total 4 inspection per year) and a pre-storm monthly visual inspections are also required for storm events that occur between October - May (i.e. 1 to 8 inspections per year depending on number of storm events during that period). In total, the existing Permit requires 5 to 12 visual inspections per year depending on the number of storm events. The new Permit will institute a regular interval for visual inspections at once per month or a total of 12 inspections per year. No special pre-storm visual inspections are required under the new Permit. Therefore the total number of required visual inspections due to the new Permit will increase from those required under the existing Permit.

Sampling: The existing Permit requires two storm water samples to be taken during the wet season. The new Permit increases sampling frequency to 4 samples during the wet season. The sampling requirements under the new Permit are doubled from the requirements of the existing Permit.

	Year 2014		Year 2015		Year 2016	
<i>Construction Support</i>						
Monthly Inspections	\$	12,960	\$	12,960	\$	12,960
Quarterly Sampling	\$	10,080	\$	10,080	\$	10,080
Record Keeping	\$	2,448	\$	2,448	\$	2,448
Project/Program Management	\$	5,400	\$	5,400	\$	5,400
Total	\$	30,888	\$	30,888	\$	30,888
Only 50% will be attributable to incremental operating costs for implementing the new Permit	\$	15,444	\$	15,444	\$	15,444

Supplemental Workpaper: State Water Resources Control Board Industrial Stormwater Permit Update [Cost Center: 2100-3022]

The consultant NV5 estimated a total cost of \$30,888 for post-construction activities (i.e. inspections/sampling/recordkeeping/program management) associated with operational issues of the new Permit per year. However, only 50% of this amount will be attributable to the incremental costs for implementing the new Permit (with respect to the existing Permit). Therefore, it is estimated that the incremental operational costs for implementing the new Permit will be approximately \$15,444 per year for 2014, 2015, and 2016.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: State Water Resources Control Board Industrial Stormwater Permit Update [Cost Center: 2100-3022]

From: Berkebile, Scott <Scott.Berkebile@nv5.com>
Sent: Thursday, March 13, 2014 4:35 PM
To: Gaters, Willie; Navrozali, Hashim
Cc: Bennett, Bryan D
Subject: Industrial SWPPPs fee estimate
Attachments: Fee Estimate_Industrial SWPPPs_March13_2014.pdf

Hi Willie and Hashim,

Attached is an estimate for 3 Industrial Storm Water Pollution Prevention Plans (SWPPPs) and the monitoring, reporting, and lab testing. This estimate is based on the Draft Industrial General Permit (IGP). If the Final IGP has significant changes from the Draft version, we may need to amend the scope and fee accordingly.

Here is a brief bullet list of the key scope items. The new IGP requires significantly more time to prepare a SWPPP and monitoring than the previous permit.

1. SWPPP preparation will involve doing research to determine if any spills have occurred at each site within the past 5 years. Extensive interviews and data collection at each site is also required to accurately prepare each SWPPP.
2. The Draft IGP requires monthly monitoring and reporting to the Storm Water Multiple Application and Report Tracking System (SMARTS).
3. The Draft IGP requires sampling and lab testing twice in a 6-month period. The lab results are then required to be posted on SMARTS. Lab Testing is assumed to be handled separately by SDG&E and not included in this estimate.
4. Monthly amendments to the SWPPP are also required by the Draft IGP. These amendments could be minor (i.e. personnel change, contact info) but SMARTS still needs the owner to inform them each month about any changes/amendments.

The only thing to consider is that this estimate does not include preparing/amending the Spill Prevention Control and Countermeasures (SPCCs). We would first see if there is an SPCC at each site, then determine if it can be used for the updated SWPPP or if an amended/new SPCC is required.

Please review and let us know if you have any questions.

Scott

Scott Berkebile, PE, CFM, QSD/QSP | Engineering Manager | www.NV5.com
15070 Avenue of Science, Suite 100 | San Diego, CA 92128 | ☎: (858) 385-2163 | 📠: (858) 385-0400 |



Please consider the environment before printing this e-mail

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: State Water Resources Control Board Industrial Stormwater Permit Update [Cost Center: 2100-3022]

Industrial Storm Water Pollution Prevention Plans (SWPPPs) - Fee for Project Authorization Form					
Pre-Construction Support					
		Unit Pricing or hourly rate	Quantity	Total Cost	Notes Comments:
WL 8.9	Industrial General Permit Storm Water Pollution Prevention Plan	\$4,500.00	3	\$13,500.00	Price for 3 sites (one powerplant and two Treatment Storage and Disposal Facilities). Field Survey is listed as separate cost (below) for budgetary purposes. Typically, Spill Prevention Control and Countermeasures (SPCCs) are prepared or amended with each SWPPP. Costs for SPCCs are not included in this estimate but can be added upon SDG&E request.
WL 8.4.A.1	Field Survey by Qualified SWPPP Practitioner (QSP) for SWPPP development	\$120.00	15	\$1,800.00	Assumes 5 hours of field survey time for each of the 3 Industrial General Permit (IGP) SWPPPs
<i>Sub-total for Pre-construction Tasks</i>				\$15,300.00	
Construction Support (based on 12-month duration)					
WL 8.4.A.1	Monthly inspections by QSP	\$120.00	108	\$12,960.00	Monthly inspections for 3 sites. Assumes each inspection is 4.5 hours with 8 total inspections per year. Other 4 inspections are budgeted in with the sampling task since it is required 4 times per year.
WL 8.4.A.1	Quarterly sampling by QSP and LAB coordination/delivery	\$120.00	84	\$10,080.00	Quarterly sampling, lab coordination and drop-off for 3 sites. Assumes each site's sampling task is 7 hours with 4 total per year.
WL 8.5.A.4	Daily Office Activities and Record Keeping (QSP)	\$102.00	24	\$2,448.00	Includes monthly Storm Water Multiple Application and Report Tracking System (SMARIS) reports, uploading of sampling results, and quarterly amendments for all 3 sites
WL 8.15	Project Management/Program Management	\$150.00	36	\$5,400.00	assumes 3 hours per quarter per site (3 sites total) spent managing project during implementation phase (includes local/state/federal agency coordination, emailing, phone calls, meetings, and all other coordination with SDG&E on schedule, budgets, and misc issues)
<i>Sub-total for Construction Tasks</i>				\$30,888.00	
Total for all Tasks:				\$46,188.00	

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: Vault Dewatering Permit Renewal [Cost Center: 2100-3022]



14725 Alton Parkway
Irvine, CA 92618-2027
949.472.3505
949.472.8373 Fax
www.rbf.com
www.mbakercorp.com

May 22, 2014

Sent via email to wgaters@semprautilities.com

Subject: Revised Scope and Fee for Utility Vault NPDES Permit Implementation Services

Dear Willie,

Thank you for inviting RBF Consulting to provide a scope and fee to support SDG&E's Utility Vault Permit implementation program. Please see the attached revised spreadsheet for a summary of services and prices to implement a turnkey program, including development or modification of the Pollution Prevention Plan, development of the two Special Study work plans, field work including routine monitoring and Special Study monitoring, and reporting, as well as all supporting documents and activities. The proposed list of tasks in the spreadsheet can be modified as needed, and we are happy to discuss all aspects of this proposal with you. As requested, this is a brief sketch of our approach and fee. If you decide to move ahead, we are happy to provide you with additional details.

This scope and fee assumes Utility Vault Permit adoption in mid-2014, and implementation beginning rainy season of 2014/15. If the adoption date moves, the implementation schedule may also change and affect when costs are incurred, but the overall numbers will remain consistent. This assumes a preliminary site visit with you and/or your staff to learn your individual program basics, and to discuss development of your program during permit implementation. Two prices are provided for Year 1. The price difference reflects whether we develop the new PPP using the current PPP as a baseline, or begin fresh.

I look forward to your review of this proposal, and am available to discuss at your convenience. You can reach me at (949) 855-3613 or tanyab@rbf.com.

Sincerely,

A handwritten signature in black ink that reads 'Tanya B.' followed by a stylized flourish.

Tanya Bilezikjian, P.E.
Senior Associate
Surface Water
RBF Consulting, A Company of Michael Baker International

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: Vault Dewatering Permit Renewal [Cost Center: 2100-3022]

14725 Alton Parkway
Irvine, CA 92618-2027
949.472.3505
949.472.8373 Fax
www.rbf.com
www.mbakercorp.com



Year 1 Task	Project Manager		Senior Engineer		Engineer		Assistant Engineer		Reimb Lab	Reimb Mile	Total	
	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost				
Develop NOI	16	\$ 2,720	0	\$ -	0	\$ -	6	\$ 630	\$ -	150 \$ 89	\$ 3,439	
Develop PPP (using current PPP)	40	\$ 6,800	16	\$ 2,560	20	\$ 2,700	20	\$ 2,100	\$ -	\$ -	\$ 14,160	
Develop SIP Special Study	24	\$ 4,080	4	\$ 640	0	\$ -	0	\$ -	\$ -	\$ -	\$ 4,720	
Develop ASBS Special Study	24	\$ 4,080	4	\$ 640	0	\$ -	0	\$ -	\$ -	\$ -	\$ 4,720	
Develop Sampling Protocol	0	\$ -	8	\$ 1,280	0	\$ -	8	\$ 840	\$ -	\$ -	\$ 2,120	
Conduct Routine Annual Monitoring	0	\$ -	4	\$ 640	20	\$ 2,700	20	\$ 2,100	\$ 4,500	300 \$ 177	\$ 10,117	
Conduct Year 1 SIP Special Study	8	\$ 1,360	0	\$ -	0	\$ -	8	\$ 840	\$ 7,500	150 \$ 89	\$ 9,789	
Conduct Year 1 ASBS Special Study	8	\$ 1,360	0	\$ -	0	\$ -	8	\$ 840	\$ 3,000	150 \$ 89	\$ 5,289	
Develop Annual Report	4	\$ 680	40	\$ 6,400	0	\$ -	20	\$ 2,100	\$ -	\$ -	\$ 9,180	
<i>Cost assuming completely new PPP</i>											Total	\$ 67,783
<i>Cost assuming modification of existing PPP (recommended)</i>											Total	\$ 63,533

Year 2 Task	Project Manager		Senior Engineer		Engineer		Assistant Engineer		Reimb Lab	Reimb Mile	Total	
	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost				
Review and Update PPP	8	\$ 1,360	4	\$ 640	0	\$ -	8	\$ 840	\$ -	0 \$ -	\$ 2,840	
Conduct Routine Annual Monitoring	0	\$ -	4	\$ 640	20	\$ 2,700	20	\$ 2,100	\$ 4,500	300 \$ 177	\$ 10,240	
Conduct Year 2 SIP Special Study	8	\$ 1,360	4	\$ 640	0	\$ -	8	\$ 840	\$ 3,000	0 \$ -	\$ 5,840	
Conduct Year 2 ASBS Special Study	8	\$ 1,360	4	\$ 640	0	\$ -	8	\$ 840	\$ 3,000	0 \$ -	\$ 5,840	
Develop Annual Report	4	\$ 680	40	\$ 6,400	0	\$ -	20	\$ 2,100	\$ -	150 \$ 89	\$ 9,330	
<i>Cost assuming completely new PPP</i>											Total	\$ 34,090

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: Vault Dewatering Permit Renewal [Cost Center: 2100-3022]

14725 Alton Parkway
Irvine, CA 92618-2027
949.472.3505
949.472.8373 Fax
www.rbf.com
www.mbakercorp.com



Year 3	Project Manager		Senior Engineer		Engineer		Assistant Engineer		Reimb Lab		Reimb Mile		Total
	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	
Conduct Routine Annual Monitoring	0	\$ -	4	\$ 640	20	\$ 2,700	20	\$ 2,100	\$ 4,500		300	\$ 177	\$ 10,240
Develop Annual Report	4	\$ 680	40	\$ 6,400	0	\$ -	20	\$ 2,100	\$ -		150	\$ 89	\$ 9,330
													Total
													\$ 19,570

Summary	
Year 1 (starting PPP from scratch)	\$ 67,783
Year 1 (using existing PPP as base)	\$ 63,533
Year 2	\$ 34,090
Year 3	\$ 19,570
Total	\$ 121,443
	\$ 117,193

Supplemental Workpaper State Water Resources Control Board Discharge Permit (Natural Gas) [Cost Center: 2100-3022]

Natural gas pipeline operations and maintenance (O&M) and construction activities require the discharge of wastewater (e.g., discharges from groundwater dewatering and pipeline hydrostatic pressure test) that will require environmental permits to be obtained under the federal Clean Water Act and the California Porter-Cologne Act. Similar activities and similar permitting is required of all of the major gas pipeline operators in the state of California. To facilitate permitting for these activities and other pipeline activities, and to obtain consistent permit requirements throughout the state, SDG&E (with SCG and PG&E) is requesting to obtain programmatic permit(s) from the State Water Resources Control Board (SWRCB). These permits would be focused only on natural gas facility activities.

The SWRCB Discharge Permit (Natural Gas) is a National Pollutant Discharge Elimination System (NPDES) permit process that does not require review under the California Environmental Quality Act (CEQA), i.e., “non-CEQA”. The SWRCB does not have staffing or funding for this effort and have requested the utilities to fund a consultant to develop the permits. Based upon a budgetary estimate from a consultant (see the “Cost Estimate for Programmatic Permitting” by Mikhail Ogawa Engineering that follows), the estimated costs for developing the Statewide Programmatic NPDES permit(s) (Natural Gas) (non-CEQA) for hydrostatic pressure test water and groundwater is \$185,932. The cost of the permit(s) would be shared between the three utilities, SDG&E, SCG and PG&E. The cost share for SDG&E is calculated as follows.

Theoretically, each company would have a 1/3 share of the permit cost, however, the 2/3 share representing SDG&E and SCG would be shared on a pro-rated basis based on the company’s percent of the estimated miles of pipeline requiring hydrotesting and replacement, as follows:

Estimated Miles of Pipeline requiring Hydrotesting and Replacement:

SDG&E	27 miles
SCG	192 miles
Total	219 miles

SDG&E’s percentage of the total miles = $27/219 = 12.3\%$

SDG&E’s portion of cost for this project is 12.3% of $66.6\% = 8.2\%$ of the total cost.

The total cost for SDG&E is calculated as follows: $\$185,932 \times 8.2\% = \$15,246$

These costs would be spread out equally over 2014-2015 for \$7,623 per year.

	Total Expected Costs per Year		
	Year 2014	Year 2015	Year 2016
Utility Linear Permit	\$ 7,623	\$ 7,623	\$ -
Total	\$ 7,623	\$ 7,623	\$ -

Supplemental Workpaper: State Water Resources Control Board Programmatic 401 Certification for Linear Projects [Cost Center: 2100-3022]

SDG&E’s utility operations and maintenance (O&M) and construction activities require impacts to Waters of the United States that will require environmental permits to be obtained under Section 404 of the Clean Water Act through the Army Corps of Engineers. Each Section 404 permit must have an accompanying Section 401 Water Quality Certification (WQC) issued by the state. California Waste Discharge Requirements (WDRs) are also required for similar impacts to state-only jurisdictional waters. Similar activities and similar permitting is required of other companies that conduct LUPs in California. To facilitate permitting for these activities, and to obtain consistent permit requirements throughout the state, a number of companies (e.g., gas, electric and telecommunications) are requesting to obtain a programmatic Section 401 Water Quality Certification (WQC) and Waste Discharge Requirements (WDRs) from the State Water Resources Control Board (SWRCB).

The State Water Resources Control Board (SWRCB) does not have staffing or funding for this effort and have requested that the utility companies involved fund a consultant to develop the permits. Based upon a budgetary estimate from a consultant (see letter “Cost Estimate for Programmatic Permitting” by Mikhail Ogawa Engineering), the estimated costs for developing the Section 401 Water Quality Certification (WQC) and Waste Discharge Requirements (WDRs) for activities requiring California Environmental Quality Act (CEQA) review are \$1,468,670. The cost of these permits would be shared equally between five companies. The cost share for SDG&E is calculated as follows:

$$\$1,468,670/5 = \$293,734$$

These costs would be spread out equally over 2015 and 2016 for \$146,867 per year.

	Total Expected Costs per Year		
	Year 2014	Year 2015	Year 2016
Utility Linear Permit \$	-	\$ 146,867	\$ 146,867
Total	\$ -	\$ 146,867	\$ 146,867

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: State Water Resources Control Board Discharge Permit (Natural Gas) and State Water Resources Control Board Programmatic 401 Certification for Linear Projects [Cost Center: 2100-3022]



MOE

MIKHAIL OGAWA ENGINEERING

November 20, 2013

Mr. Fredrik Jacobsen
San Diego Gas & Electric Company
8315 Century Park Court (CP-21E)
San Diego, California 92123

SUBJECT: COST ESTIMATE FOR PROGRAMMATIC PERMITTING

Dear Mr. Jacobsen:

In response to your request, Mikhail Ogawa Engineering (MOE) is pleased to submit pro-forma cost estimates for developing two programmatic permits with the State Water Resources Control Board (SWRCB). Based on our understanding, the two permits would serve to permit activities conducted by utility companies in a general permitting manner.

Cost estimates have been developed for the two permit approaches and are identified as follows:

- 1) Statewide Programmatic NPDES Permit (Non-CEQA)
- 2) Statewide Programmatic Permit for Activities Requiring CEQA

The cost estimates are provided as an attachment and include assumptions made for developing staff hours required. Rates for staff hours are variable and pre-calculated into the "Line Item Cost".

If you have any questions, please call me at (619) 994-7074.

Respectfully submitted,

Mikhail Ogawa
Principal

c. File

ATTACHMENT: Pro-Forma Cost Estimates for General Programmatic Permits

Supplemental Workpaper: State Water Resources Control Board Discharge Permit (Natural Gas) and State Water Resources Control Board Programmatic 401 Certification for Linear Projects [Cost Center: 2100-3022]

Pro-Forma Cost Estimates for General Programmatic Permits

1) Statewide General Permit for Utilities: NPDES PERMIT (Non-CEQA)

This description and budget estimate is for budgeting purposes only – a more detailed analysis and scoping discussion would be necessary to develop a project level cost estimate.

This approach assumes that the permitting effort would provide coverage for activities by any utility company within the State of California.

In general, the programmatic permit would cover a spectrum of activities, with clear limits on allowable activities, for which the permit would provide coverage. It is anticipated that projects would obtain coverage under the permit by: (1) providing a description of the project and the applicable activities; (2) ensuring that the activities are within the allowable activities as described in the permit; (3) implement required mitigating practices as described in the permit; and (4) prepare reporting and tracking as required by the permit.

The general approach to the permit development would include:

- (1) coordination with all stakeholders (utilities)
- (2) identification of acceptable permit formatting
- (3) develop initial findings for SWRCB staff
- (4) general provisions and standards for the permit
- (5) identification of criteria for coverage under the permit
- (6) identification of qualifying activities to be covered under permit
- (7) identification of standard conditions and mitigating practices
- (8) coordination with SWRCB staff
- (9) develop a pre-public draft to circulate and socialize with SWRCB staff and any other identified key stakeholders
- (10) meet with SWRCB staff and address comments
- (11) develop a public draft of the permit for release and public comment
- (12) meet with SWRCB and address comments
- (13) prepare final draft permit for SWRCB adoption
- (14) preparation of Board hearing materials

Costs for the general scope of services identified above are found in the table below. These costs reflect the additional coordination, consideration and complexity of incorporating multiple utility companies and their specific interests, activities, concerns and practices.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: State Water Resources Control Board Discharge Permit (Natural Gas) and State Water Resources Control Board Programmatic 401 Certification for Linear Projects [Cost Center: 2100-3022]

<u>Non-CEQA (NPDES)</u>	<u>Staff Hours</u>	<u>Line Item Cost</u>
<ul style="list-style-type: none"> • CEQA analysis: N/A 		
<ul style="list-style-type: none"> • Confirmation of SWRCB NPDES permit standard formats, language and provisions 	24	\$ 2,424.00
<ul style="list-style-type: none"> • Identification of applicable standards and conditions 	48	\$ 5,736.00
<ul style="list-style-type: none"> • Develop pre-public draft permit <ul style="list-style-type: none"> ○ Prepare pre-public draft permit ○ Meetings with SWRCB staff to review pre-public draft permit (Assume up to 4 meetings) 	616	\$ 68,984.00
<ul style="list-style-type: none"> • Develop public draft permit <ul style="list-style-type: none"> ○ Prepare public draft permit ○ Meetings with SWRCB staff to review public draft permit (Assume up to 4 meetings) 	392	\$ 44,400.00
<ul style="list-style-type: none"> • Final draft for Board action <ul style="list-style-type: none"> ○ Review of applicant comments on public draft permit ○ Review of applicant comments on public final draft permit ○ Prepare final draft permit ○ Meetings with SWRCB staff to review final draft (Assume up to 4 meetings) ○ Preparation of response to comments document 	424	\$ 47,336.00
<ul style="list-style-type: none"> • Preparation of Board hearing materials (support to SWRCB staff) <ul style="list-style-type: none"> ○ Attend a workshop ○ Attend adoption hearing 	68	\$ 7,836.00
	16	\$ 2,208.00
	16	\$ 2,208.00
Assumed Travel Costs		\$ 4,800.00
Total Budget	1,604	\$ 185,932.00

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: State Water Resources Control Board Discharge Permit (Natural Gas) and State Water Resources Control Board Programmatic 401 Certification for Linear Projects [Cost Center: 2100-3022]

2) Statewide General Permit for Utilities: PERMIT FOR ACTIVITIES REQUIRING CEQA PROCESS

This description and budget estimate is for budgeting purposes only – a more detailed analysis and scoping discussion would be necessary to develop a project level cost estimate.

This approach assumes that the permitting effort would provide coverage for activities by any utility company within the State of California.

In general, the programmatic permit would cover a spectrum of activities, with clear limits on allowable activities, for which the permit would provide coverage. These projects would require CEQA process, e.g., activities within waters of the U.S. It is anticipated that projects would obtain coverage under the permit by: (1) providing a description of the project and the applicable activities; (2) ensuring that the activities are within the allowable activities, including coverage by programmatic CEQA document, as described in the permit; (3) implement required mitigating practices as described in the permit; and (4) prepare reporting and tracking as required by the permit.

The general approach to the permit development would include:

- (1) conduct CEQA analysis and process
 - a. compilation, review and analysis of proposed permit activities
 - b. development of CEQA document (assumed Programmatic EIR)
- (2) identification of acceptable permit formatting
- (3) develop initial findings for SWRCB staff
- (4) general provisions and standards for the permit
- (5) identification of criteria for coverage under the permit
- (6) identification of qualifying activities to be covered under permit
- (7) identification of standard conditions and mitigating practices
- (8) coordination with SWRCB staff
- (9) develop a pre-public draft to circulate and socialize with SWRCB staff and any other identified key stakeholders
- (10) meet with SWRCB staff and address comments
- (11) develop a public draft of the permit for release and public comment
- (12) meet with SWRCB and address comments
- (13) prepare final draft permit for SWRCB adoption
- (14) preparation of Board hearing materials

Costs for the general scope of services identified above are attached. These costs reflect the additional coordination, consideration and complexity of incorporating multiple utility companies and their specific interests, activities, concerns and practices.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Supplemental Workpaper: State Water Resources Control Board Discharge Permit (Natural Gas) and State Water Resources Control Board Programmatic 401 Certification for Linear Projects [Cost Center: 2100-3022]

<u>CEQA (WDR, 401 Certification)</u>	<u>Staff Hours</u>	<u>Line Item Cost</u>
<ul style="list-style-type: none"> • CEQA analysis: Compilation, review and analysis of proposed permit activities and development of CEQA document 		\$ 1,000,000.00
<ul style="list-style-type: none"> • Confirmation of SWRCB NPDES permit standard formats, language and provisions 	60	\$ 6,060.00
<ul style="list-style-type: none"> • Identification of applicable standards and conditions 	120	\$ 14,340.00
<ul style="list-style-type: none"> • Develop pre-public draft permit <ul style="list-style-type: none"> ○ Prepare pre-public draft permit ○ Meetings with SWRCB staff to review pre-public draft permit ○ Review of applicant comments on pre-public draft permit 	1540	\$ -
<ul style="list-style-type: none"> • Develop public draft permit <ul style="list-style-type: none"> ○ Prepare public draft permit ○ Meetings with SWRCB staff to review public draft permit ○ Review of applicant comments on pre-public draft permit 	1080	\$ -
<ul style="list-style-type: none"> • Final draft for Board action <ul style="list-style-type: none"> ○ Prepare public draft permit ○ Meetings with SWRCB staff to review public draft permit ○ Review of applicant comments on public draft permit 	1060	\$ -
<ul style="list-style-type: none"> • Review of applicant comments on public final draft permit <ul style="list-style-type: none"> ○ Prepare final draft permit ○ Meetings with SWRCB staff to review final draft ○ Preparation of response to comments document 		\$ 30,560.00
<ul style="list-style-type: none"> • Preparation of Board hearing materials (support to SWRCB staff) <ul style="list-style-type: none"> ○ Prepare final draft permit ○ Meetings with SWRCB staff to review final draft ○ Preparation of response to comments document 	170	\$ 40,660.00
<ul style="list-style-type: none"> • Attend a workshop 	40	\$ 16,560.00
<ul style="list-style-type: none"> • Attend adoption hearing 	40	\$ 30,560.00
Assumed Travel Costs		\$ 19,590.00
Total Budget	4,110	\$ 1,468,670.00

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: D. Policy, Oversight & Compliance Management
Cost Center: VARIOUS

Summary for Category: D. Policy, Oversight & Compliance Management

	In 2013\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2013	2014	2015	2016
Labor	1,040	1,144	1,144	1,144
Non-Labor	195	195	195	195
NSE	0	0	0	0
Total	1,235	1,339	1,339	1,339
FTE	8.7	9.5	9.5	9.5

Cost Centers belonging to this Category:

2100-3282.000 ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

Labor	607	641	641	641
Non-Labor	143	143	143	143
NSE	0	0	0	0
Total	750	784	784	784
FTE	5.8	6.2	6.2	6.2

2100-3588.000 VP OPERATIONS SUPPORT

Labor	275	345	345	345
Non-Labor	29	29	29	29
NSE	0	0	0	0
Total	304	374	374	374
FTE	1.7	2.1	2.1	2.1

2100-3589.000 ENVIRONMENTAL SERVICES DIRECTOR

Labor	158	158	158	158
Non-Labor	23	23	23	23
NSE	0	0	0	0
Total	181	181	181	181
FTE	1.2	1.2	1.2	1.2

Note: Totals may include rounding differences.

Beginning of Workpaper
2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: D. Policy, Oversight & Compliance Management
Category-Sub: 1. Policy, Oversight & Compliance Management
Cost Center: 2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

Activity Description:

The Environmental Strategy and Sustainability group manages the environmental component of SDG&E's internal environmental governance and self-evaluation program – the Environmental & Safety Compliance Management Program, and provides a number of other strategic functions. For example, the Environmental Strategy and Sustainability group develops, tracks, and reports to management environmental compliance metrics and goals. The group develops, manages and maintains internal environmental communications; environmental training modules; an internal environmental website as the repository for this information; responsibility for monitoring, coordinating and tracking environmental regulatory developments; and, coordinates sustainability activities.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. These are costs related to staffing of the management activities for Environmental Services and for executive oversight over the Environmental departments at SDG&E and SoCalGas. The incremental upward pressures, which are attributed to reflecting full year funding for these FTE positions, are best applied to a conservative base year level of costs.

Non-Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. These are costs related to staffing of the management activities for Environmental Services and for executive oversight over the Environmental departments at SDG&E and SoCalGas. The incremental upward pressures, which are attributed to reflecting full year funding for these FTE positions, are best applied to a conservative base year level of costs. Note that there were no non-labor adjustments for cost center 2100-3282.000.

NSE - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. These are costs related to staffing of the management activities for Environmental Services and for executive oversight over the Environmental departments at SDG&E and SoCalGas. The incremental upward pressures, which are attributed to reflecting full year funding for these FTE positions, are best applied to a conservative base year level of costs. Note that there were no NSE adjustments for cost center 2100-3282.000.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2009	2010	2011	2012	2013	2014	2015	2016	
Labor		460	558	534	575	607	641	641	641	
Non-Labor		67	84	173	207	143	143	143	143	
NSE		0	0	0	0	0	0	0	0	
Total		526	642	708	783	750	784	784	784	
FTE		4.9	6.0	5.6	5.9	5.8	6.2	6.2	6.2	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

Cost Center Allocations (Incurred Costs):

	2013 Adjusted-Recorded					2014 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	54	0	0	54	0.63	54	0	0	54	0.63
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	553	143	0	696	5.13	587	143	0	730	5.53
Total Incurred	607	143	0	750	5.76	641	143	0	784	6.16
% Allocation										
Retained	79.34%	79.34%				79.34%	79.34%			
SEU	19.83%	19.83%				19.83%	19.83%			
CORP	0.83%	0.83%				0.83%	0.83%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2015 Adjusted-Forecast					2016 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	54	0	0	54	0.63	54	0	0	54	0.63
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	587	143	0	730	5.53	587	143	0	730	5.53
Total Incurred	641	143	0	784	6.16	641	143	0	784	6.16
% Allocation										
Retained	79.34%	79.34%				79.34%	79.34%			
SEU	19.83%	19.83%				19.83%	19.83%			
CORP	0.83%	0.83%				0.83%	0.83%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: D. Policy, Oversight & Compliance Management
Category-Sub: 1. Policy, Oversight & Compliance Management
Cost Center: 2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2013

The Environmental Strategy & Sustainability Cost Center manages the SDG&E Environmental & Safety Compliance Management Plan function, monitors the SDG&E environmental compliance reporting, develops all environmental training modules (mandatory and non-mandatory) for both SDG&E and SoCalGas. This cost center is shared on a basis of an assigned labor responsibilities of each employee in this cost center.

Cost Center Allocation Percentage for 2014

The Environmental Strategy & Sustainability Cost Center manages the SDG&E Environmental & Safety Compliance Management Plan function, monitors the SDG&E environmental compliance reporting, develops all environmental training modules (mandatory and non-mandatory) for both SDG&E and SoCalGas. This cost center is shared on a basis of an assigned labor responsibilities of each employee in this cost center.

Cost Center Allocation Percentage for 2015

The Environmental Strategy & Sustainability Cost Center manages the SDG&E Environmental & Safety Compliance Management Plan function, monitors the SDG&E environmental compliance reporting, develops all environmental training modules (mandatory and non-mandatory) for both SDG&E and SoCalGas. This cost center is shared on a basis of an assigned labor responsibilities of each employee in this cost center.

Cost Center Allocation Percentage for 2016

The Environmental Strategy & Sustainability Cost Center manages the SDG&E Environmental & Safety Compliance Management Plan function, monitors the SDG&E environmental compliance reporting, develops all environmental training modules (mandatory and non-mandatory) for both SDG&E and SoCalGas. This cost center is shared on a basis of an assigned labor responsibilities of each employee in this cost center.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	607	607	607	34	34	34	641	641	641
Non-Labor	Base YR Rec	143	143	143	0	0	0	143	143	143
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		750	750	750	34	34	34	784	784	784
FTE	Base YR Rec	5.8	5.8	5.8	0.4	0.4	0.4	6.2	6.2	6.2

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2014	34	0	0	34	0.4	1-Sided Adj

Labor adjustment for full-year funding.

2014 Total	34	0	0	34	0.4	
-------------------	-----------	----------	----------	-----------	------------	--

2015	34	0	0	34	0.4	1-Sided Adj
------	----	---	---	----	-----	-------------

Labor adjustment for full-year funding.

2015 Total	34	0	0	34	0.4	
-------------------	-----------	----------	----------	-----------	------------	--

2016	34	0	0	34	0.4	1-Sided Adj
------	----	---	---	----	-----	-------------

Labor adjustment for full-year funding.

2016 Total	34	0	0	34	0.4	
-------------------	-----------	----------	----------	-----------	------------	--

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	364	511	452	494	524
Non-Labor	61	81	167	204	143
NSE	0	0	0	0	0
Total	425	591	619	698	666
FTE	4.2	5.9	4.9	5.1	4.9
Adjustments (Nominal \$) **					
Labor	0	-61	-4	0	0
Non-Labor	0	-2	0	0	0
NSE	0	0	0	0	0
Total	0	-63	-4	0	0
FTE	0.0	-0.8	-0.1	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	364	450	448	494	524
Non-Labor	61	79	167	204	143
NSE	0	0	0	0	0
Total	425	528	615	698	666
FTE	4.2	5.1	4.8	5.1	4.9
Vacation & Sick (Nominal \$)					
Labor	56	72	66	72	83
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	56	72	66	72	83
FTE	0.7	0.9	0.8	0.8	0.9
Escalation to 2013\$					
Labor	40	37	20	10	0
Non-Labor	6	6	7	4	0
NSE	0	0	0	0	0
Total	46	42	27	13	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	460	558	534	575	607
Non-Labor	67	84	173	207	143
NSE	0	0	0	0	0
Total	526	642	708	783	750
FTE	4.9	6.0	5.6	5.9	5.8

* 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
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	0	-61	-4	0	0
Non-Labor	0	-2	-0.166	0	0
NSE	0	0	0	0	0
Total	0	-63	-4	0	0
FTE	0.0	-0.8	-0.1	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009 Total	0	0	0	0.0			
2010	-61	-2	0	-0.8	CCTR Transf	To 2200-2443.000	MHARPER20131 113072904640
<p>Employee Transfer Adjustment: In early 2011 one employee in cost center 2100-3282 Environmental Strategy and Sustainability supporting SCG was formally transferred from SDGE to SCG. The FTE calculation is based on time in position at SDGE, the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring employee.</p>							
2010 Total	-61	-2	0	-0.8			
2011	-4	-0.166	0	-0.1	CCTR Transf	To 2200-2443.000	MHARPER20131 113073320987
<p>Employee Transfer Adjustment: In early 2011 one employee in cost center 2100-3282 Environmental Strategy and Sustainability supporting SCG was formally transferred from SDGE to SCG. The FTE calculation is based on time in position at SDGE, the recorded SDGE O&M costs for labor and the associated non-labor used in performance of the SCG activities. The non-labor is calculated based upon the ratio of total hours worked by the transferring employee.</p>							
2011 Total	-4	-0.166	0	-0.1			
2012 Total	0	0	0	0.0			

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: D. Policy, Oversight & Compliance Management
Category-Sub: 1. Policy, Oversight & Compliance Management
Cost Center: 2100-3282.000 - ENVIRONMENTAL STRATEGY & SUSTAINABILITY MANAGER

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From Cctr</u>	<u>RefID</u>
2013 Total	0	0	0	0.0			

Note: Totals may include rounding differences.

Beginning of Workpaper
2100-3588.000 - VP OPERATIONS SUPPORT

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3588.000 - VP OPERATIONS SUPPORT

Activity Description:

The Executive Vice President and one administrative assistant make up this functional area. The Executive Oversight function provides oversight and leadership for Operations Support for both SDG&E and Southern California Gas Company.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. These are costs related to staffing of the management activities for Environmental Services and for executive oversight over the Environmental departments at SDG&E and SoCalGas. The incremental upward pressures, which are attributed to reflecting full year funding for these FTE positions, are best applied to a conservative base year level of costs.

Non-Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. These are costs related to staffing of the management activities for Environmental Services and for executive oversight over the Environmental departments at SDG&E and SoCalGas. The incremental upward pressures, which are attributed to reflecting full year funding for these FTE positions, are best applied to a conservative base year level of costs. Note that there were no non-labor adjustments for cost center 2100-3588.000.

NSE - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. These are costs related to staffing of the management activities for Environmental Services and for executive oversight over the Environmental departments at SDG&E and SoCalGas. The incremental upward pressures, which are attributed to reflecting full year funding for these FTE positions, are best applied to a conservative base year level of costs. Note that there were no NSE adjustments for cost center 2100-3588.000.

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
		2009	2010	2011	2012	2013	2014	2015	2016	
Years										
Labor	401	361	351	361	275	345	345	345		
Non-Labor	72	28	37	28	29	29	29	29		
NSE	0	0	0	0	0	0	0	0		
Total	473	389	388	390	303	373	373	373		
FTE	2.2	2.1	2.1	2.1	1.7	2.1	2.1	2.1		

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3588.000 - VP OPERATIONS SUPPORT

Cost Center Allocations (Incurred Costs):

	2013 Adjusted-Recorded					2014 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	6	5	0	11	0.00	6	5	0	11	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	268	23	0	291	1.74	338	23	0	361	2.14
Total Incurred	274	28	0	302	1.74	344	28	0	372	2.14
% Allocation										
Retained	91.75%	91.75%				41.00%	41.00%			
SEU	4.02%	4.02%				57.00%	57.00%			
CORP	3.51%	3.51%				1.00%	1.00%			
Unreg	0.72%	0.72%				1.00%	1.00%			

	2015 Adjusted-Forecast					2016 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	6	5	0	11	0.00	6	5	0	11	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	338	23	0	361	2.14	338	23	0	361	2.14
Total Incurred	344	28	0	372	2.14	344	28	0	372	2.14
% Allocation										
Retained	41.00%	41.00%				41.00%	41.00%			
SEU	57.00%	57.00%				57.00%	57.00%			
CORP	1.00%	1.00%				1.00%	1.00%			
Unreg	1.00%	1.00%				1.00%	1.00%			

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: D. Policy, Oversight & Compliance Management
Category-Sub: 1. Policy, Oversight & Compliance Management
Cost Center: 2100-3588.000 - VP OPERATIONS SUPPORT

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2013

During 2013 this administrative cost center was shared on a weighted average of sharing percentage rules for all cost centers under the management responsibility of this executive vice president. During 2013 only SDGE cost centers were managed by this executive vice president.

Cost Center Allocation Percentage for 2014

Starting in 2014 this management scope cost center expanded to include both SDGE and SCG cost centers.

This is the executive vice president cost center that provides directional oversight and governance over the SDGE and SCG Operational Support organization. This cost center will allocate costs in proportion to the weighted average of shared service amounts for all cost centers under direction of the office of this vice president.

Cost Center Allocation Percentage for 2015

Starting in 2014 this management scope cost center expanded to include both SDGE and SCG cost centers.

This is the executive vice president cost center that provides directional oversight and governance over the SDGE and SCG Operational Support organization. This cost center will allocate costs in proportion to the weighted average of shared service amounts for all cost centers under direction of the office of this vice president.

Cost Center Allocation Percentage for 2016

Starting in 2014 this management scope cost center expanded to include both SDGE and SCG cost centers.

This is the executive vice president cost center that provides directional oversight and governance over the SDGE and SCG Operational Support organization. This cost center will allocate costs in proportion to the weighted average of shared service amounts for all cost centers under direction of the office of this vice president.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3588.000 - VP OPERATIONS SUPPORT

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	275	275	275	70	70	70	345	345	345
Non-Labor	Base YR Rec	29	29	29	0	0	0	29	29	29
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		303	303	303	70	70	70	373	373	373
FTE	Base YR Rec	1.7	1.7	1.7	0.4	0.4	0.4	2.1	2.1	2.1

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2014	70	0	0	70	0.4	1-Sided Adj

Labor adjustment for full-year funding.

2014 Total	70	0	0	70	0.4	
-------------------	-----------	----------	----------	-----------	------------	--

2015	70	0	0	70	0.4	1-Sided Adj
------	----	---	---	----	-----	-------------

Labor adjustment for full-year funding.

2015 Total	70	0	0	70	0.4	
-------------------	-----------	----------	----------	-----------	------------	--

2016	70	0	0	70	0.4	1-Sided Adj
------	----	---	---	----	-----	-------------

Labor adjustment for full-year funding.

2016 Total	70	0	0	70	0.4	
-------------------	-----------	----------	----------	-----------	------------	--

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: D. Policy, Oversight & Compliance Management
Category-Sub: 1. Policy, Oversight & Compliance Management
Cost Center: 2100-3588.000 - VP OPERATIONS SUPPORT

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	317	291	295	310	237
Non-Labor	66	26	35	28	29
NSE	0	0	0	0	0
Total	383	317	330	338	265
FTE	1.8	1.8	1.8	1.8	1.5
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	317	291	295	310	237
Non-Labor	66	26	35	28	29
NSE	0	0	0	0	0
Total	383	317	330	338	265
FTE	1.8	1.8	1.8	1.8	1.5
Vacation & Sick (Nominal \$)					
Labor	49	46	43	45	38
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	49	46	43	45	38
FTE	0.3	0.3	0.3	0.3	0.3
Escalation to 2013\$					
Labor	35	24	13	6	0
Non-Labor	6	2	1	0	0
NSE	0	0	0	0	0
Total	41	26	15	7	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	401	361	351	361	275
Non-Labor	72	28	37	28	29
NSE	0	0	0	0	0
Total	473	389	388	390	303
FTE	2.1	2.1	2.1	2.1	1.8

* 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
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3588.000 - VP OPERATIONS SUPPORT

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009 Total	0	0	0	0.0			
2010 Total	0	0	0	0.0			
2011 Total	0	0	0	0.0			
2012 Total	0	0	0	0.0			
2013 Total	0	0	0	0.0			

Note: Totals may include rounding differences.

Beginning of Workpaper
2100-3589.000 - ENVIRONMENTAL SERVICES DIRECTOR

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3589.000 - ENVIRONMENTAL SERVICES DIRECTOR

Activity Description:

The Director of Environmental Services provides overall leadership and direction to the Environmental Services organization and is supported by one administrative assistant.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. These are costs related to staffing of the management activities for Environmental Services and for executive oversight over the Environmental departments at SDG&E and SoCalGas. The incremental upward pressures, which are attributed to reflecting full year funding for these FTE positions, are best applied to a conservative base year level of costs.

Non-Labor - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. These are costs related to staffing of the management activities for Environmental Services and for executive oversight over the Environmental departments at SDG&E and SoCalGas. The incremental upward pressures, which are attributed to reflecting full year funding for these FTE positions, are best applied to a conservative base year level of costs. Note that there were no non-labor adjustments for cost center 2100-3589.000.

NSE - Base YR Rec

A base year forecast methodology plus incremental upward pressures was used to determine cost requirements. This method is most appropriate because it identifies specific environmental regulatory changes and their related costs impacting the company during the GRC period. These are costs related to staffing of the management activities for Environmental Services and for executive oversight over the Environmental departments at SDG&E and SoCalGas. The incremental upward pressures, which are attributed to reflecting full year funding for these FTE positions, are best applied to a conservative base year level of costs. Note that there were no NSE adjustments for cost center 2100-3589.000.

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
		2009	2010	2011	2012	2013	2014	2015	2016	
Years										
	Labor	293	400	255	297	158	158	158	158	
	Non-Labor	42	35	11	25	23	23	23	23	
	NSE	0	0	0	0	0	0	0	0	
	Total	335	435	265	322	180	180	180	180	
	FTE	2.2	2.8	1.9	2.4	1.2	1.2	1.2	1.2	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3589.000 - ENVIRONMENTAL SERVICES DIRECTOR

Cost Center Allocations (Incurred Costs):

	2013 Adjusted-Recorded					2014 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	0	0	0	0.00	0	0	0	0	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	158	23	0	181	1.18	158	23	0	181	1.18
Total Incurred	158	23	0	181	1.18	158	23	0	181	1.18
% Allocation										
Retained	99.24%	99.24%				99.24%	99.24%			
SEU	0.76%	0.76%				0.76%	0.76%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2015 Adjusted-Forecast					2016 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	0	0	0	0.00	0	0	0	0	0.00
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	158	23	0	181	1.18	158	23	0	181	1.18
Total Incurred	158	23	0	181	1.18	158	23	0	181	1.18
% Allocation										
Retained	99.24%	99.24%				99.24%	99.24%			
SEU	0.76%	0.76%				0.76%	0.76%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: D. Policy, Oversight & Compliance Management
Category-Sub: 1. Policy, Oversight & Compliance Management
Cost Center: 2100-3589.000 - ENVIRONMENTAL SERVICES DIRECTOR

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2013

This is the Environmental Services Director cost center that administrates over the SDG&E Environmental Services organization. This cost center is shared on a basis of a collective roll-up of forecasted labor and non-labor spend and shared service allocations from the other operational cost centers in Environmental Services, subject to the leadership and administration of the director. This cost center includes an administrative support staff in addition to the Director.

Cost Center Allocation Percentage for 2014

This is the Environmental Services Director cost center that administrates over the SDG&E Environmental Services organization. This cost center is shared on a basis of a collective roll-up of forecasted labor and non-labor spend and shared service allocations from the other operational cost centers in Environmental Services, subject to the leadership and administration of the director. This cost center includes an administrative support staff in addition to the Director.

Cost Center Allocation Percentage for 2015

This is the Environmental Services Director cost center that administrates over the SDG&E Environmental Services organization. This cost center is shared on a basis of a collective roll-up of forecasted labor and non-labor spend and shared service allocations from the other operational cost centers in Environmental Services, subject to the leadership and administration of the director. This cost center includes an administrative support staff in addition to the Director.

Cost Center Allocation Percentage for 2016

This is the Environmental Services Director cost center that administrates over the SDG&E Environmental Services organization. This cost center is shared on a basis of a collective roll-up of forecasted labor and non-labor spend and shared service allocations from the other operational cost centers in Environmental Services, subject to the leadership and administration of the director. This cost center includes an administrative support staff in addition to the Director.

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3589.000 - ENVIRONMENTAL SERVICES DIRECTOR

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	158	158	158	0	0	0	158	158	158
Non-Labor	Base YR Rec	23	23	23	0	0	0	23	23	23
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		180	180	180	0	0	0	180	180	180
FTE	Base YR Rec	1.2	1.2	1.2	0.0	0.0	0.0	1.2	1.2	1.2

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2014 Total	0	0	0	0	0.0	
2015 Total	0	0	0	0	0.0	
2016 Total	0	0	0	0	0.0	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: D. Policy, Oversight & Compliance Management
Category-Sub: 1. Policy, Oversight & Compliance Management
Cost Center: 2100-3589.000 - ENVIRONMENTAL SERVICES DIRECTOR

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	187	260	212	255	136
Non-Labor	33	25	10	24	23
NSE	0	0	0	0	0
Total	220	285	221	280	159
FTE	1.5	1.9	1.7	2.1	1.0
Adjustments (Nominal \$) **					
Labor	45	62	2	0	0
Non-Labor	6	8	0	0	0
NSE	0	0	0	0	0
Total	51	70	3	0	0
FTE	0.4	0.5	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	232	322	214	255	136
Non-Labor	39	33	10	24	23
NSE	0	0	0	0	0
Total	271	355	224	280	159
FTE	1.9	2.4	1.7	2.1	1.0
Vacation & Sick (Nominal \$)					
Labor	36	51	31	37	22
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	36	51	31	37	22
FTE	0.3	0.4	0.3	0.3	0.2
Escalation to 2013\$					
Labor	25	26	10	5	0
Non-Labor	4	2	0	0	0
NSE	0	0	0	0	0
Total	29	29	10	5	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	293	400	255	297	158
Non-Labor	42	35	11	25	23
NSE	0	0	0	0	0
Total	335	435	265	322	180
FTE	2.2	2.8	2.0	2.4	1.2

* 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.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
 Witness: Richard S. Pearson
 Category: D. Policy, Oversight & Compliance Management
 Category-Sub: 1. Policy, Oversight & Compliance Management
 Cost Center: 2100-3589.000 - ENVIRONMENTAL SERVICES DIRECTOR

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	45	62	2	0	0
Non-Labor	6	8	0.441	0	0
NSE	0	0	0	0	0
Total	51	70	3	0	0
FTE	0.4	0.5	0.0	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009	45	6	0	0.4	CCTR Transf	From 2100-3464.000	CSCHRAMM2013 1108174948870

Transfer labor, FTE, and non-labor costs associated with Environmental Affairs Manager, and Program Manager functions from USS cost center 2100-3464 Environmental Affairs to USS cost center 2100-3589 Environmental Services Director to align costs where function resides due to re-organization.

2009 Total	45	6	0	0.4			
-------------------	-----------	----------	----------	------------	--	--	--

2010	62	8	0	0.5	CCTR Transf	From 2100-3464.000	CSCHRAMM2013 1108175108013
------	----	---	---	-----	-------------	--------------------	-------------------------------

Transfer labor, FTE, and non-labor costs associated with Environmental Affairs Manager, and Program Manager functions from USS cost center 2100-3464 Environmental Affairs to USS cost center 2100-3589 Environmental Services Director to align costs where function resides due to re-organization.

2010 Total	62	8	0	0.5			
-------------------	-----------	----------	----------	------------	--	--	--

2011	2	0.441	0	0.0	CCTR Transf	From 2100-3464.000	CSCHRAMM2013 1108175615320
------	---	-------	---	-----	-------------	--------------------	-------------------------------

Transfer labor, FTE, and non-labor costs associated with Environmental Affairs Manager, and Program Manager functions from USS cost center 2100-3464 Environmental Affairs to USS cost center 2100-3589 Environmental Services Director to align costs where function resides due to re-organization.

2011 Total	2	0.441	0	0.0			
-------------------	----------	--------------	----------	------------	--	--	--

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Shared Services Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson
Category: D. Policy, Oversight & Compliance Management
Category-Sub: 1. Policy, Oversight & Compliance Management
Cost Center: 2100-3589.000 - ENVIRONMENTAL SERVICES DIRECTOR

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From Cctr</u>	<u>RefID</u>
2012 Total	0	0	0	0.0			
2013 Total	0	0	0	0.0			

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
2016 GRC - APP
Non-Shared Service Workpapers

Area: ENVIRONMENTAL
Witness: Richard S. Pearson

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2100-0190	000	HAZARDOUS MATERIAL MANAGEMENT
2100-0323	000	GENERATION DIVESTURE
2100-0398	000	HAZARDOUS MATERIAL - SDGE
2100-3033	000	ENV SAFETY & FAC LVC for Budget Use Only
2100-3034	000	ENVIRONMENTAL MANAGEMENT NORTH MANAGER
2100-3035	000	SITE ASSESSMENT & MITIGATION
2100-3301	000	ENVIRONMENTAL FEES
2100-3680	000	SUNRISE ENV & LAND
2100-3685	000	ELECTRIC OPERATIONS
2100-3746	000	SUNRISE R/W PRIVATE
2100-3747	000	SUNRISE R/W AGENCY
2100-3748	000	SUNRISE LAND SERVICES
2100-3749	000	SUNRISE LAND MANAGEMENT
2100-3750	000	SUNRISE ENVIRONMENTAL MITIGATION
2100-3825	000	SUNRISE ENV OPERATIONS & MAINTENANCE
2100-3851	000	SUNRISE ENVIRONMENTAL
2100-3858	000	ENVIRONMENTAL CAPITAL PROGRAMS