

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

Application No. 17-10-____

Exhibit No.: (SDG&E-19-WP)

WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF LISA C. DAVIDSON
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

OCTOBER 2017



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

Exhibit SDG&E-19-WP - CS - INFORMATION & TECHNOLOGIES

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Overall Summary For Exhibit No. SDG&E-19-WP

Area:	CS - INFORMATION & TECHNOLOGIES
Witness:	Lisa C. Davidson

Description	In 2016 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Non-Shared Services	21,744	23,802	24,960	26,058
Shared Services	343	343	343	343
Total	22,087	24,145	25,303	26,401

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson

Summary of Non-Shared Services Workpapers:

Description	In 2016 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
A. Customer Service Information	21,744	23,802	24,960	26,058
Total	21,744	23,802	24,960	26,058

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson
Category: A. Customer Service Information
Workpaper: VARIOUS

Summary for Category: A. Customer Service Information

	In 2016\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Labor	14,235	14,151	14,870	14,870
Non-Labor	7,509	9,651	10,090	11,188
NSE	0	0	0	0
Total	21,744	23,802	24,960	26,058
FTE	145.0	143.7	150.3	150.3

Workpapers belonging to this Category:

1IN001.000 Residential Customer Services

Labor	2,643	2,736	3,140	3,140
Non-Labor	2,619	2,634	3,051	3,127
NSE	0	0	0	0
Total	5,262	5,370	6,191	6,267
FTE	23.8	24.7	28.6	28.6

1IN002.000 Business Services

Labor	4,217	3,907	3,912	3,912
Non-Labor	820	820	900	900
NSE	0	0	0	0
Total	5,037	4,727	4,812	4,812
FTE	48.4	44.5	44.4	44.4

1IN003.000 Marketing Research & Analytics

Labor	3,112	3,112	3,112	3,112
Non-Labor	3,107	4,623	4,478	5,462
NSE	0	0	0	0
Total	6,219	7,735	7,590	8,574
FTE	30.8	30.8	30.8	30.8

1IN004.000 Customer Programs Pricing and Other Office

Labor	4,263	4,396	4,706	4,706
Non-Labor	963	1,574	1,661	1,699
NSE	0	0	0	0
Total	5,226	5,970	6,367	6,405
FTE	42.0	43.7	46.5	46.5

Note: Totals may include rounding differences.

Beginning of Workpaper
1IN001.000 - Residential Customer Services

San Diego Gas & Electric Company
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Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 1. Residential Services
 Workpaper: 1IN001.000 - Residential Customer Services

Activity Description:

Residential Customer Services (RCS) is responsible for front-office services to deliver, manage, or support the needs of residential and small business customers. The key subgroups within the RCS department are Residential Outreach, Clean Transportation, Customer Experience, Residential Planning and Analysis, Office of Customer Privacy, Customer Contact Center (CCC), Branch Offices, and directors oversight of these areas. Note the expenses for the Branch Offices, CCC Operations and CCC Support can be found in SDG&E-18 Witness Jerry Stewart Customer Service Office Operations Work papers 100005, 100006 and 100007 respectively.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast method was used for both labor and non-labor because the last recorded year accurately reflects the expense level associated with current activity levels and is the appropriate basis for forecasting TY2019 expenses. Both labor and non-labor have exhibited an overall upward trend during the 2012-2016 historical period. This is primarily due to the increased focus on rate education and outreach, customer privacy, the transition of ongoing Dynamic Pricing support to O&M in 2016 ref. D.16-06-054, and the expansion of the Clean Transportation group. Therefore, the base year provides a reasonable starting point for future expenditures.

Non-Labor - Base YR Rec

See above.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		2,027	2,324	1,967	2,099	2,643	2,736	3,140	3,140	
Non-Labor		1,108	1,483	1,324	2,373	2,619	2,635	3,052	3,128	
NSE		0	0	0	0	0	0	0	0	
Total		3,134	3,807	3,291	4,472	5,262	5,371	6,192	6,268	
FTE		17.7	20.1	16.6	17.8	23.7	24.7	28.6	28.6	

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson
Category: A. Customer Service Information
Category-Sub: 1. Residential Services
Workpaper: 1IN001.000 - Residential Customer Services

Summary of Adjustments to Forecast:

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	Base YR Rec	2,643	2,643	2,643	93	497	497	2,736	3,140	3,140
Non-Labor	Base YR Rec	2,619	2,619	2,619	15	432	508	2,634	3,051	3,127
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		5,262	5,262	5,262	108	929	1,005	5,370	6,191	6,267
FTE	Base YR Rec	23.8	23.8	23.8	0.9	4.8	4.8	24.7	28.6	28.6

Forecast Adjustment Details:

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID	
2017	Other	-103	0	0	-103	-0.9	1-Sided Adj	CSCHRAMM20161202092414227	
Explanation:		VREP: Voluntary retirement of Project Manager in Customer Experience. Position to be absorbed by current staffing. Labor savings: (\$103k) (.9 FTE)							
2017	Other	0	15	0	15	0.0	1-Sided Adj	CSCHRAMM20161201162436980	
Explanation:		Capital Project Impacts: Customer Authorization Project (CAP) Software: Software license (Kofax) costs for CAP solution (Customer Authorization Project (CAP) - Ref. IT Capital Project ID T16036).							
2017	Other	196	0	0	196	1.8	1-Sided Adj	CSCHRAMM20161201162843357	
Explanation:		Expansion of Clean Energy Program: Labor increase of \$196k 1.8 FTE's for business development and financial support in response to number of CPUC filings. Calculation: \$196k 1.8 FTEs: 1.0 FTE \$129k Regulatory & Policy Manager (MRR: PM3) .8 FTE \$67k Business Analyst (MRR: AD1)							
2017 Total		93	15	0	108	0.9			
2018	Other	-103	0	0	-103	-0.9	1-Sided Adj	CSCHRAMM20170308135453243	
Explanation:		VREP: Voluntary retirement of Project Manager in Customer Experience. Position to be absorbed by current staffing. Labor Savings: (\$103k) (.9 FTE)							
2018	Other	0	179	0	179	0.0	1-Sided Adj	CSCHRAMM20161202093739307	
Explanation:		Capital Project Impacts: Customer Authorization Project: Software maintenance / support costs of Letters of Authorization solution (Customer Authorization Project (CAP) - Ref. IT Capital Project ID T16036).							

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 1. Residential Services
 Workpaper: 1IN001.000 - Residential Customer Services

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj_Type	RefID
2018	Other	102	3	0	105	1.0	1-Sided Adj	CSCHRAMM20161202093303860

Explanation: CIM Advisor: Manage Customer Information Management infrastructure and processes including Letters of Authorization tool, customer information sharing & tracking tools, CIM business processes. Oversees projects to enhance these tools, including collection of requirements and engineering of new solutions. Works with vendor on fixes and upgrades. Trains employees on use of tools and CIM processes.
 Customer Information Mangement Advisor (MRR: AD2 \$102k labor \$3k non-labor).

2018	Other	498	0	0	498	4.7	1-Sided Adj	CSCHRAMM20161202093909430
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Explanation: Expansion of Clean Transportation: Labor increase of \$498k 4.7 FTE's for business development and financial support in response to number of CPUC filings.
 Calculation: \$498k 4.7 FTEs:
 1.0 FTE \$129k Regulatory & Policy Manager (MRR: PM3)
 .8 FTE \$67k Business Analyst (MRR: AD1)
 1.0 FTE \$102k Marketing Research & Analytics Analyst (MRR: AD2)
 1.0 FTE \$102k Policy Project Manager (MRR: PM1)
 .9 FTE \$98k Customer Outreach Manager (MRR: PM2)

2018	Other	0	250	0	250	0.0	1-Sided Adj	CSCHRAMM20170308135342790
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Explanation: Electric Vehicle (EV) Education and Outreach: Targeted education and outreach costs for informing customers about the rates, charging equipment and installation, as well as off-peak charging. Additionally, it covers the required EV education and outreach to utility customers about the environmental benefits of driving electric vehicles as related to the reduction of greenhouse gas emissions (GHG) set forth by Assembly Bill 32 – to reduce the state’s GHG emissions to 1990 levels by 2020.

2018 Total		497	432	0	929	4.8		
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2019	Other	-103	0	0	-103	-0.9	1-Sided Adj	CSCHRAMM20170308143841317
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Explanation: VREP: Voluntary retirement of Project Manager in Customer Experience. Position to be absorbed by current staffing.
 Labor savings: (\$103k) (.9 FTE)

2019	Other	0	179	0	179	0.0	1-Sided Adj	CSCHRAMM20161202105853237
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Explanation: Capital Project Impacts: Customer Authorization Project (CAP): Software maintenance / support costs of Letters of Authorization solution (Customer Authorization Project (CAP) - Ref. IT Capital Project ID T16036).

2019	Other	102	3	0	105	1.0	1-Sided Adj	CSCHRAMM20161202105843607
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Note: Totals may include rounding differences.

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2019 GRC - APP
Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 1. Residential Services
 Workpaper: 1IN001.000 - Residential Customer Services

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
Explanation: CIM Advisor: Manage Customer Information Management infrastructure and processes including Letters of Authorization tool, customer information sharing & tracking tools, CIM business processes. Oversees projects to enhance these tools, including collection of requirements and engineering of new solutions. Works with vendor on fixes and upgrades. Trains employees on use of tools and CIM processes. Customer Information Mangement Advisor (MRR: AD2 \$102k labor \$3k non-labor).								
2019	Other	0	33	0	33	0.0	1-Sided Adj	CSCHRAMM20161202110236750
Explanation: Privacy Training: Non-labor costs for development and hosting licensing fees of privacy training for SDG&E employees. Privacy training to comply with D.11-07-056 (Smart Grid Privacy Decision) Ordering Paragraph 1 and Section 9c of Attachment D. \$50K every other year. Normalize Forecast adjustment: \$50k forecasted in 2019 and 2021 total \$100K divided by 3 yr GRC cycle = \$33k normalized.								
2019	Other	0	43	0	43	0.0	1-Sided Adj	CSCHRAMM20161202110307107
Explanation: Cool Zones: Per D.16-11-022 Ordering paragraph 116 - Utilities to seek funding for cooling centers in their next GRC.								
2019	Other	498	0	0	498	4.7	1-Sided Adj	CSCHRAMM20161202110328233
Explanation: Expansion of Clean Transportation: Labor increase of \$498k 4.7 FTE's for Business Development and financial support in response to number of CPUC filings. Calculation: \$498k 4.7 FTEs: 1.0 FTE \$129k Regulatory & Policy Manager (MRR: PM3) .8 FTE \$67k Business Analyst (MRR: AD1) 1.0 FTE \$102k Marketing Research & Analytics Analyst (MRR: AD2) 1.0 FTE \$102k Policy Project Manager (MRR: PM1) .9 FTE \$98k Customer Outreach Manager (MRR: PM2)								
2019	Other	0	250	0	250	0.0	1-Sided Adj	CSCHRAMM20170308144120010
Explanation: Electric Vehicle (EV) Education and Outreach: Targeted education and outreach costs for informing customers about the rates, charging equipment and installation, as well as off-peak charging. Additionally, it covers the required EV education and outreach to utility customers about the environmental benefits of driving electric vehicles as related to the reduction of greenhouse gas emissions (GHG) set forth by Assembly Bill 32 – to reduce the state’s GHG emissions to 1990 levels by 2020.								
2019 Total		497	508	0	1,005	4.8		

Note: Totals may include rounding differences.

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Category-Sub: 1. Residential Services
Workpaper: 1IN001.000 - Residential Customer Services

Determination of Adjusted-Recorded (Incurred Costs):

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
Recorded (Nominal \$)*					
Labor	1,921	2,150	1,575	1,803	2,254
Non-Labor	878	2,415	2,007	2,257	2,650
NSE	0	0	0	0	0
Total	2,800	4,565	3,581	4,060	4,904
FTE	18.0	19.3	13.4	15.4	19.3
Adjustments (Nominal \$) **					
Labor	-301	-275	45	-28	13
Non-Labor	202	-951	-684	112	-30
NSE	0	0	0	0	0
Total	-99	-1,226	-639	85	-18
FTE	-2.7	-2.2	0.7	-0.2	0.8
Recorded-Adjusted (Nominal \$)					
Labor	1,620	1,876	1,620	1,776	2,267
Non-Labor	1,080	1,464	1,323	2,369	2,619
NSE	0	0	0	0	0
Total	2,700	3,339	2,943	4,145	4,886
FTE	15.3	17.1	14.1	15.2	20.1
Vacation & Sick (Nominal \$)					
Labor	235	297	259	274	376
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	235	297	259	274	376
FTE	2.5	3.0	2.5	2.7	3.7
Escalation to 2016\$					
Labor	172	151	88	49	0
Non-Labor	28	19	1	4	0
NSE	0	0	0	0	0
Total	200	170	90	53	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2016\$)					
Labor	2,027	2,324	1,967	2,099	2,643
Non-Labor	1,108	1,483	1,324	2,373	2,619
NSE	0	0	0	0	0
Total	3,134	3,807	3,291	4,472	5,262
FTE	17.8	20.1	16.6	17.9	23.8

* 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
2019 GRC - APP
Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson
Category: A. Customer Service Information
Category-Sub: 1. Residential Services
Workpaper: 1IN001.000 - Residential Customer Services

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	-301	-275	45	-28	13
Non-Labor	202	-951	-684	112	-30
NSE	0	0	0	0	0
Total	-99	-1,226	-639	85	-18
FTE	-2.7	-2.2	0.7	-0.2	0.8

Detail of Adjustments to Recorded:

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
2012	Other	113	0	0	0.8	CCTR Transf From 2100-3780.000	CSCHRAMM20161004150957830
Explanation: Transfer labor and FTE for Project Manager position from cost center 2100-3780 in work paper group 100001 Advanced Metering Operations to cost center 2100-0040 in work paper group 1IN001 Residential Services to align costs where function resides.							
2012	Other	122	4	0	1.2	CCTR Transf From 2100-3593.000	CSCHRAMM20161012142129017
Explanation: Transfer labor, FTE, and associated non-labor for Customer Experience Advisor function from cost center 2100-3593 in work paper group 1IN003 Marketing, Research, & Analytics to cost center 2100-3839 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2012	Other	0	15	0	0.0	CCTR Transf From 2100-0630.000	CSCHRAMM20161016151842013
Explanation: Transfer Outreach non-labor costs from cost center 2100-0630 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2012	Other	-40	0	0	-0.4	CCTR Transf To 2100-3081.000	CSCHRAMM20161011110029730
Explanation: Transfer Sr Software Developer labor and FTE from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center to 2100-3081 work paper group 1IT001 IT Applications to align costs where function/activity resides.							
2012	Other	-210	-29	0	-1.9	CCTR Transf To 2100-3841.000	CSCHRAMM20161011150610827
Explanation: Transfer Products Svcs Mgr and Project Manager labor, FTE, and associated non-labor costs from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3841 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to align costs where function/activity resides.							
2012	Other	0	250	0	0.0	1-Sided Adj	CSCHRAMM20161011150829640
Explanation: Remove one-time non-recurring credit associated with Mover Services direct transfer agreement.							
2012	Other	67	0	0	0.8	CCTR Transf From 2100-3446.000	CSCHRAMM20161012143617423

Note: Totals may include rounding differences.

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2019 GRC - APP
Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 1. Residential Services
 Workpaper: 1IN001.000 - Residential Customer Services

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
Explanation: Transfer labor and FTE for Outreach Energy Solutions Advisor from cost center 2100-3446 in work paper group 1IN003 Marketing, Research, & Analytics to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2012	Other	-89	0	0	-0.9	CCTR Transf To 2100-3168.000	CSCHRAMM20161011151102840
Explanation: Transfer Sr. Research Analyst labor and FTE from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3168 work paper group 1IN003 Marketing, Research, & Analytics to align costs where function/activity resides.							
2012	Other	0	-90	0	0.0	CCTR Transf To 2100-3168.000	CSCHRAMM20161011151314443
Explanation: Transfer non-labor contractor costs associated with segmentation research from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3168 in work paper group 1IN003 Marketing, Research, & Analytics to align costs where activity resides.							
2012	Other	-264	0	0	-2.3	CCTR Transf To 2100-3893.000	CSCHRAMM20161018180006733
Explanation: Transfer labor and FTE associated with the project titles Smart Grid Strategic Prgm. Mgr.; Chief Engineer; IT Architect; Smart Grid Policy Mgr; and Engineering Intern from cost center 2100-3751 (Sr. Director Clean Transportation) in work paper group 1IN001 Residential Services to cost center 2100-3893 (Advanced Technology Integration) in work paper group 1ED024 Technology Utilization to align function/activity where it resides.							
2012	Other	0	52	0	0.0	CCTR Transf From 2100-3454.000	CSCHRAMM20161016154911463
Explanation: Transfer Outreach (2-1-1) non-labor costs from cost center 2100-3454 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2012 Total		-301	202	0	-2.7		
2013	Other	0	-81	0	0.0	CCTR Transf To 2100-3168.000	CSCHRAMM20161011151438100
Explanation: Transfer non-labor contractor costs associated with segmentation research from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3168 in work paper group 1IN003 Marketing, Research, & Analytics to align costs where activity resides.							
2013	Other	-225	-8	0	-2.0	CCTR Transf To 2100-3841.000	CSCHRAMM20161011151658700
Explanation: Transfer Products Svcs Mgr and Project Manager labor, FTE, and associated non-labor costs from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3841 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to align costs where function/activity resides.							
2013	Other	66	0	0	0.8	CCTR Transf From 2100-3593.000	CSCHRAMM20161012144955190
Explanation: Transfer labor and FTE for Outreach Energy Solutions Advisor from cost center 2100-3593 in work paper group 1IN003 Communications, Marketing, Research & Web to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 1. Residential Services
 Workpaper: 1IN001.000 - Residential Customer Services

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2013	Other	0	-918	0	0.0	CCTR Transf To 2100-3841.000	CSCHRAMM20161011151826253
Explanation: Transfer non-labor costs associated with Manage Act Save Program from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3841 in work paper group 1IN004 Customer Programs, Projects, Pricing, and Other Office to align costs where activity resides.							
2013	Other	-39	0	0	-0.3	CCTR Transf To 2100-3480.000	CSCHRAMM20161011153819513
Explanation: Transfer Billing Project Manager labor and FTE from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3480 in work paper group 100002 Billing to align costs where function/activity resides.							
2013	Other	-56	0	0	-0.6	CCTR Transf To 2100-3168.000	CSCHRAMM20161012130213737
Explanation: Transfer Sr. Research Analyst labor and FTE from cost center 2100-4027 in work paper group 1IN001 Residential Services to cost center to 2100-3168 in work paper group 1IN003 Marketing, Research & Analytics to align costs where function/activity resides.							
2013	Other	-21	0	0	-0.1	CCTR Transf To 2100-3893.000	CSCHRAMM20161018180117157
Explanation: Transfer labor and FTE associated with the project titles Smart Grid Strategic Prgm. Mgr.; Chief Engineer; Mgr. Smart Grid; and Smart Grid Policy Mgr. from cost center 2100-3751 (Sr. Director Clean Transportation) in work paper group 1IN001 Residential Services to cost center 2100-3893 (Advanced Technology Integration) in work paper group 1ED024 Technology Utilization to align function/activity where it resides.							
2013	Other	0	56	0	0.0	CCTR Transf From 2100-3454.000	CSCHRAMM20161016195746780
Explanation: Transfer Outreach (2-1-1) non-labor costs from cost center 2100-3454 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2013 Total		-275	-951	0	-2.2		
2014	Other	0	-497	0	0.0	CCTR Transf To 2100-3841.000	CSCHRAMM20161011155149100
Explanation: Transfer non-labor costs associated with Manage Act Save Program from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3841 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to align costs where activity resides.							
2014	Other	13	0	0	0.2	CCTR Transf From 2100-3593.000	CSCHRAMM20161012145500693
Explanation: Transfer labor and FTE for Outreach Energy Solutions Advisor from cost center 2100-3593 in work paper group 1IN003 Marketing, Research & Analytics to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2014	Other	60	0	0	0.7	1-Sided Adj	CSCHRAMM20161011160645977
Explanation: One-sided labor and non-labor adjustment to include Energy Data Access Memo Account pursuant to D.14-05-016 reference internal order: 7073400							

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 1. Residential Services
 Workpaper: 1IN001.000 - Residential Customer Services

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2014	Other	0	-197	0	0.0	1-Sided Adj	CSCHRAMM20161011161925833
Explanation: Normalize independent privacy audit costs (mandated by CPUC D.11-07-056 and D.12-08-045 privacy audit performed once every GRC cycle.) Actual expense in 2014 \$295,429 for TY2016 GRC. Forecast years 2014-2016. Occurs 1x every 3 years \$295,429 / 3 = \$98,476. Adjustment amount = \$295,429-\$98,476 (2014 amount)=\$196,953 of which \$98,476 will be moved to 2015 and 2016.							
2014	Other	0	10	0	0.0	CCTR Transf From 2100-3454.000	CSCHRAMM20161016203630547
Explanation: Transfer Outreach (2-1-1) non-labor costs from cost center 2100-3454 in work paper group 11N004 Customer Programs, Pricing, and Other Office to cost center 2100-4027 in work paper group 11N001 Residential Services to align costs where activity/function resides.							
2014	Other	-28	0	0	-0.2	CCTR Transf To 2100-3893.000	CSCHRAMM20161018180423817
Explanation: Transfer labor/FTE costs associated with the project title Chief Engineer from cost center 2100-3751 (Sr. Director Clean Transportation) in work paper group 11N001 Residential Services to cost center 2100-3893 (Advanced Technology Integration) in work paper group 1ED024 Technology Utilization to align function/activity where it resides.							
2014 Total		45	-684	0	0.7		
2015	Other	0	-64	0	0.0	1-Sided Adj	CSCHRAMM20161011155726083
Explanation: One-sided adjustment to align expenses posted in Dec. 2015 for (Q1 2016) Aclara maintenance & hosting license fees.							
2015	Other	0	78	0	0.0	1-Sided Adj	CSCHRAMM20161011160744290
Explanation: One-sided labor and non-labor adjustment to include Energy Data Access Memo Account pursuant to D.14-05-016 reference internal order: 7073400							
2015	Other	0	98	0	0.0	1-Sided Adj	CSCHRAMM20161011162055503
Explanation: Normalize independent privacy audit costs (mandated by CPUC D.11-07-056 and D.12-08-045 privacy audit performed once every GRC cycle.) Actual expense in 2014 \$295,429 for TY2016 GRC. Forecast years 2014-2016. Occurs 1x every 3 years \$295,429 / 3 = \$98,476 per year 2014-2016.							
2015	Other	-28	0	0	-0.2	CCTR Transf To 2100-3893.000	CSCHRAMM20161018180530790
Explanation: Transfer labor and FTE costs associated with the project title Chief Engineer from cost center 2100-3751 (Sr. Director Clean Transportation) in work paper group 11N001 Residential Services to cost center 2100-3893 (Advanced Technology Integration) in work paper group 1ED024 Technology Utilization to align function/activity where it resides.							
2015 Total		-28	112	0	-0.2		

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 1. Residential Services
 Workpaper: 1IN001.000 - Residential Customer Services

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2016	Other	43	27	0	1.0	1-Sided Adj	CSCHRAMM20170214122829433
Explanation: One-sided labor, FTE, and non-labor adjustment to include Energy Data Access Memo Account pursuant to D.14-05-016 reference internal order: 7073400							
2016	Other	0	82	0	0.0	CCTR Transf From 2100-0004.000	CSCHRAMM20170222154331140
Explanation: Transfer non-labor costs associated with Clean Transportation marketing/outreach from cost center 2100-0004 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3675 in work paper group 1IN001 Residential Services to align costs where function/activity resides.							
2016	Other	0	98	0	0.0	1-Sided Adj	CSCHRAMM20170214122914843
Explanation: Normalize independent privacy audit costs (mandated by CPUC D.11-07-056 and D.12-08-045 privacy audit performed once every GRC cycle.) Actual expense in 2014 \$295,429 for TY2016 GRC. Forecast years 2014-2016. Occurs 1x every 3 years \$295,429 / 3 = \$98,476 per year 2014-2016.							
2016	Other	-30	0	0	-0.2	CCTR Transf To 2100-3893.000	CSCHRAMM20170221100000420
Explanation: Transfer labor and FTE associated with the Chief Engineer from cost center 2100-3751 (Sr. Director Clean Transportation) in work paper group 1IN001 Residential Services to cost center 2100-3893 Advanced Technology Integration in work paper group 1ED024 to align function/activity where it resides.							
2016	Other	0	-237	0	0.0	1-Sided Adj	CSCHRAMM20170224132032403
Explanation: Normalize Aclara and Batch Rate Comparison 5 yr. license renewal. Total amount to be paid \$791,263 / 5 yr term = \$158,253 per year. One-sided adjustment to normalize costs paid in 2016. Amount paid in 2016 \$395,632. Adjust out (\$237,379) total in 2016 history after adjustment \$158,253.							
2016 Total		13	-30	0	0.8		

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 1. Residential Services
 Workpaper: 1IN001.000 - Residential Customer Services

RAMP Item # 1

Ref ID: CSCHRAMM20170508172505710

RAMP Chapter: SDG&E-3

Program Name: Fire Preparedness & Outreach

Program Description: Ensure public is aware of SDG&E's operation activities during high fire risk situations. Work closely with Commercial & Industrial (C&I) Services Outreach, Residential Services Outreach, Media Relations, Public Affairs, and Community Relations to plan, organize, and participate in community outreach events ensuring that key external stakeholders and channels are utilized efficiently. Provide funding for programs from community partners and first responders that support fire prevention and emergency response.

Risk/Mitigation:

Risk: Employee, Contractor, and Public Safety

Mitigation: Customer Communications and First Responder Training

Forecast CPUC Cost Estimates (\$000)

	<u>2017</u>	<u>2018</u>	<u>2019</u>
Low	0	0	0
High	0	0	0

Funding Source: CPUC-GRC

Forecast Method: Base Year

Work Type: Mandated

Work Type Citation: GO-166

Historical Embedded Cost Estimates (\$000)

Embedded Costs: 11

Explanation: Residential Customer Outreach expenses for community fire safety outreach events. (Ref IO 200404182 and cost centers 2100-4027, 2100-3592) Note: For RAMP Ranges see Business Services (1IN002.000) work paper for RAMP Chapter 3 Employee, Contractor, and Public Safety, Mitigation: Customer Communications and First Responder Training; Mitigation Program: Fire and Preparedness & Outreach.

Beginning of Workpaper
1IN002.000 - Business Services

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 2. Business Services
 Workpaper: 1IN002.000 - Business Services

Activity Description:

Business Services provides a number of necessary customer support services to commercial customers, including agricultural, industrial, and governmental entities and some customer services to residential customers. Its primary objective is to support the energy service and information needs of San Diego's diverse business population both proactively and reactively. Provide the information and tools to assist them in understanding their rate and service options, managing their energy costs, acquiring or modifying their energy service needs, and safely dealing with planned and unplanned service disruptions.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast method is used for TY 2019 GRC because the business has changed significantly due to Small and Medium Business (SMB) Time-of-Use Default. Starting in 2015, a special task force was created to assist SMB Customers make informed choices and decision in regards to their pricing plan. Additional self service tools were added to the customer tool box which aids in the customers understanding of their pricing options while reducing reliance on support staff. Therefore, the base year provides a reasonable starting point for future expenditures.

Non-Labor - Base YR Rec

See above.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		4,512	4,317	4,323	4,323	4,217	3,907	3,912	3,912	
Non-Labor		952	796	478	894	820	821	901	901	
NSE		0	0	0	0	0	0	0	0	
Total		5,464	5,113	4,801	5,217	5,037	4,728	4,813	4,813	
FTE		49.1	47.3	48.4	49.6	48.4	44.5	44.4	44.4	

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson
Category: A. Customer Service Information
Category-Sub: 2. Business Services
Workpaper: 1IN002.000 - Business Services

Summary of Adjustments to Forecast:

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	Base YR Rec	4,217	4,217	4,217	-310	-305	-305	3,907	3,912	3,912
Non-Labor	Base YR Rec	820	820	820	0	80	80	820	900	900
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		5,037	5,037	5,037	-310	-225	-225	4,727	4,812	4,812
FTE	Base YR Rec	48.4	48.4	48.4	-3.9	-4.0	-4.0	44.5	44.4	44.4

Forecast Adjustment Details:

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>	
2017	FOF-Ongoing	-310	0	0	-310	-3.9	1-Sided Adj	CSCHRAMM20161202111952470	
Explanation:		Business Optimization (FOF): Labor benefits such as customer self-service and resource alignment efficiencies.							
2017 Total		-310	0	0	-310	-3.9			
2018	Other	100	80	0	180	1.0	1-Sided Adj	CSCHRAMM20170621150053630	
Explanation:		AB802 Commercial Benchmarking: Addition of 1 FTE Business Advisor (MRR: AD2 \$100K) and \$80K in non-labor to support implementation of AB802 Commercial Benchmarking.							
2018	FOF-Ongoing	-405	0	0	-405	-5.0	1-Sided Adj	CSCHRAMM20161202112327143	
Explanation:		Business Optimization (FOF): Labor benefits such as customer self-service and resource alignment efficiencies.							
2018 Total		-305	80	0	-225	-4.0			
2019	Other	100	80	0	180	1.0	1-Sided Adj	CSCHRAMM20170508184720770	
Explanation:		AB802 Commercial Benchmarking: Addition of 1 FTE Business Advisor (MRR: AD2 \$100K) and \$80K in non-labor to support implementation of AB802 Commercial Benchmarking.							
2019	FOF-Ongoing	-405	0	0	-405	-5.0	1-Sided Adj	CSCHRAMM20161202112636720	
Explanation:		Business Optimization (FOF): Labor benefits such as customer self-service and resource alignment efficiencies.							
2019 Total		-305	80	0	-225	-4.0			

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson
Category: A. Customer Service Information
Category-Sub: 2. Business Services
Workpaper: 1IN002.000 - Business Services

Determination of Adjusted-Recorded (Incurred Costs):

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
Recorded (Nominal \$)*					
Labor	3,670	3,582	3,591	3,679	3,663
Non-Labor	904	775	477	890	820
NSE	0	0	0	0	0
Total	4,574	4,356	4,068	4,569	4,483
FTE	43.6	41.8	41.5	42.4	41.8
Adjustments (Nominal \$) **					
Labor	-64	-98	-30	-20	-46
Non-Labor	24	12	0	2	0
NSE	0	0	0	0	0
Total	-39	-86	-30	-18	-46
FTE	-1.3	-1.5	-0.5	-0.2	-0.8
Recorded-Adjusted (Nominal \$)					
Labor	3,607	3,484	3,560	3,658	3,617
Non-Labor	928	786	477	892	820
NSE	0	0	0	0	0
Total	4,535	4,270	4,038	4,550	4,437
FTE	42.3	40.3	41.0	42.2	41.0
Vacation & Sick (Nominal \$)					
Labor	523	553	569	565	600
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	523	553	569	565	600
FTE	6.8	7.1	7.4	7.4	7.4
Escalation to 2016\$					
Labor	383	280	194	100	0
Non-Labor	24	10	1	1	0
NSE	0	0	0	0	0
Total	406	290	195	102	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2016\$)					
Labor	4,512	4,317	4,323	4,323	4,217
Non-Labor	952	796	478	894	820
NSE	0	0	0	0	0
Total	5,464	5,113	4,801	5,217	5,037
FTE	49.1	47.4	48.4	49.6	48.4

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 2. Business Services
 Workpaper: 1IN002.000 - Business Services

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	-64	-98	-30	-20	-46
Non-Labor	24	12	0	2	0
NSE	0	0	0	0	0
Total	-39	-86	-30	-18	-46
FTE	-1.3	-1.5	-0.5	-0.2	-0.8

Detail of Adjustments to Recorded:

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
2012	Other	-61	0	0	-0.8	CCTR Transf To 2100-0712.000	CSCHRAMM20161012141603013
Explanation: Transfer Business Planning Sr. Business Analyst labor and FTE from cost center 2100-0634 in work paper group 1IN002 Business Services to cost center 2100-0712 in work paper group 1AG001 Regulatory Planning to align cost where activities/functions reside.							
2012	Other	-43	0	0	-0.8	CCTR Transf To 2100-0022.000	CSCHRAMM20170223161139823
Explanation: Transfer labor and FTE associated with Business Service Credit Rep from cost center 2100-3580 in work paper group 1IN002 Business Services to cost center 2100-0022 in work paper group 1OO003 Credit & Collections to align costs where function/activity resides.							
2012	Other	41	24	0	0.3	CCTR Transf From 2100-3579.000	CSCHRAMM20161016192819453
Explanation: Transfer Business Services Mkts. Mgr. labor, FTE, and associated non-labor from cost center 2100-3579 in work paper group 1IN004 Customer Programs, Pricing and Other Office to cost center 2100-0634 in work paper group 1IN002 Business Services to align costs where activities/functions resides.							
2012 Total		-64	24	0	-1.3		
2013	Other	-65	0	0	-0.8	CCTR Transf To 2100-0712.000	CSCHRAMM20161012141702020
Explanation: Transfer Business Planning Sr. Business Analyst labor and FTE from cost center 2100-0634 in work paper group 1IN002 Business Services to cost center 2100-0712 in work paper group 1AG001 Regulatory Planning to align cost where activities/functions reside.							
2013	Other	-45	0	0	-0.8	CCTR Transf To 2100-0022.000	CSCHRAMM20170223161253190
Explanation: Transfer labor and FTE associated with Business Service Credit Rep. from cost center 2100-3580 in work paper group 1IN002 Business Services to cost center 2100-0022 in work paper group 1OO003 Credit & Collections to align costs where function/activity resides.							
2013	Other	13	12	0	0.1	CCTR Transf From 2100-3579.000	CSCHRAMM20161016200913367

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
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Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 2. Business Services
 Workpaper: 1IN002.000 - Business Services

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
Explanation: Transfer Business Services Mkts. Mgr. and Program Analyst labor, FTE, and associated non-labor from cost center 2100-3579 in work paper group 1IN004 Customer Programs, Pricing and Other Office to cost center 2100-0634 in work paper group 1IN002 Business Services to align costs where activities/functions resides.							
2013 Total		-98	12	0	-1.5		
2014	Other	-30	0	0	-0.5	CCTR Transf To 2100-0022.000	CSCHRAMM20170223161403003
Explanation: Transfer labor and FTE associated with Business Service Credit Rep from cost center 2100-3580 in work paper group 1IN002 Business Services to cost center 2100-0022 in work paper group 1OO003 Credit & Collections to align costs where function/activity resides.							
2014 Total		-30	0	0	-0.5		
2015	Other	-14	0	0	0.0	1-Sided Adj	CSCHRAMM20161012133034770
Explanation: Exclude MOBILE HOME PARK activities related to capital. Reference IO's: 200478183, 200478184, 200478187, 200478188, 200478189							
2015	Other	38	2	0	0.6	CCTR Transf From 2100-3579.000	CSCHRAMM20161016205606300
Explanation: Transfer Business Services Project Specialist labor, FTE, and associated non-labor from cost center 2100-3579 in work paper group 1IN004 Customer Programs, Pricing and Other Office to cost center 2100-0634 in work paper group 1IN002 Business Services to align costs where activities/functions resides.							
2015	Other	-45	0	0	-0.8	CCTR Transf To 2100-0022.000	CSCHRAMM20170223161505410
Explanation: Transfer labor and FTE associated with Business Service Credit Rep from cost center 2100-0634 in work paper group 1IN002 Business Services to cost center 2100-0022 in work paper group 1OO003 Credit & Collections to align costs where function/activity resides.							
2015 Total		-20	2	0	-0.2		
2016	Other	-46	0	0	-0.8	CCTR Transf To 2100-0022.000	CSCHRAMM20170223161627037
Explanation: Transfer labor and FTE associated with Business Service Credit Rep from cost center 2100-0634 in work paper group 1IN002 Business Services to cost center 2100-0022 in work paper group 1OO003 Credit & Collections to align costs where function/activity resides.							
2016 Total		-46	0	0	-0.8		

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 2. Business Services
 Workpaper: 1IN002.000 - Business Services

RAMP Item # 1

Ref ID: CSCHRAMM20170308144830830

RAMP Chapter: SDG&E-3

Program Name: Fire Preparedness & Outreach

Program Description: Ensure public is aware of SDG&E's operation activities during high fire risk situations. Work closely with Commercial & Industrial (C&I) Services Outreach, Residential Services Outreach, Media Relations, Public Affairs, and Community Relations to plan, organize, and participate in community outreach events ensuring that key external stakeholders and channels are utilized efficiently. Provide funding for programs from community partners and first responders that support fire prevention and emergency response. Forecast methodology is base year.

Risk/Mitigation:

Risk: Employee, Contractor and Public Safety

Mitigation: Customer Communications and First Responder training

Forecast CPUC Cost Estimates (\$000)

	<u>2017</u>	<u>2018</u>	<u>2019</u>
Low	75	75	75
High	90	90	90

Funding Source: CPUC-GRC

Forecast Method: Base Year

Work Type: Mandated

Work Type Citation: GO 166

Historical Embedded Cost Estimates (\$000)

Embedded Costs: 80

Explanation: Business Services - Community Fire Safety Program Management and outreach to plan, organize, and participate in community outreach events ensuring key external stakeholders and channels are utilized efficiently. 2016 embedded labor and non-labor costs for Business Services \$80k. Reference IO's 200404181 and 200404183 in cost center 2100-0622.

Beginning of Workpaper
1IN003.000 - Marketing Research & Analytics

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 3. Marketing, Research, & Analytics
 Workpaper: 1IN003.000 - Marketing Research & Analytics

Activity Description:

The Marketing, Research, and Analytics expenses cover the costs associated with developing and implementing marketing plans, mass communications, providing oversight and management of the SDG&E web site and the development of communications materials, conducting qualitative and quantitative research, creating insights through analytics, engaging customers through targeted communications, social media, support statewide collaboration regarding various marketing initiatives, and providing key services through mobile application development and management.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast method for labor and non-labor was used for TY 2019 because the last recorded year accurately reflects the expense level associated with current departmental activity. Non-labor has exhibited an overall downward trend during the 2012 – 2016 historical period, although the communications related to rates and energy pricing will continue to increase as Rate Reform progresses. Therefore, the base year provides a reasonable starting point for future expenditures.

Non-Labor - Base YR Rec

See above.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		2,504	2,623	2,513	2,635	3,112	3,112	3,112	3,112	
Non-Labor		6,225	6,281	4,856	4,736	3,107	4,623	4,478	5,462	
NSE		0	0	0	0	0	0	0	0	
Total		8,729	8,904	7,369	7,371	6,219	7,735	7,590	8,574	
FTE		25.4	26.7	25.2	26.2	30.7	30.8	30.8	30.8	

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 3. Marketing, Research, & Analytics
 Workpaper: 1IN003.000 - Marketing Research & Analytics

Summary of Adjustments to Forecast:

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	Base YR Rec	3,112	3,112	3,112	0	0	0	3,112	3,112	3,112
Non-Labor	Base YR Rec	3,107	3,107	3,107	1,516	1,371	2,355	4,623	4,478	5,462
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		6,219	6,219	6,219	1,516	1,371	2,355	7,735	7,590	8,574
FTE	Base YR Rec	30.8	30.8	30.8	0.0	0.0	0.0	30.8	30.8	30.8

Forecast Adjustment Details:

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID	
2017	Other	0	1,500	0	1,500	0.0	1-Sided Adj	CSCHRAMM20170309170918553	
Explanation:		Rate Education & Outreach: Provide communications on rate reform and conduct research to measure effectiveness. Using an integrated mix of mass media, direct mail, email, online, social media, and in the bill package to build awareness and understanding as well as to offer various services as needed. Customer research will be used to measure effectiveness and refine messaging specific to the communications activity requested on this topic of rate reform. Due to timing, full amount of authorized funding of \$2 million was not spent in 2016.							
2017	Other	0	70	0	70	0.0	1-Sided Adj	CSCHRAMM20170309171208790	
Explanation:		Marketing Automation: Software/licensing costs for the tracking and gathering of information related to digital activity.							
2017	Other	0	56	0	56	0.0	1-Sided Adj	CSCHRAMM20170309171406427	
Explanation:		Outage Communication: Outage map enterprise license. Google Maps requires an enterprise license to host SDG&E's Outage Map due to traffic far exceeding the free threshold of 25,000 external page views per day at no cost.							
2017	FOF-Ongoing	0	-110	0	-110	0.0	1-Sided Adj	CSCHRAMM20170309171502337	
Explanation:		Business Optimization (FOF): Non-labor benefits such as consolidating advertising and contracting/procurement efficiencies.							
2017 Total		0	1,516	0	1,516	0.0			
2018	Other	0	1,700	0	1,700	0.0	1-Sided Adj	CSCHRAMM20170309171738870	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
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Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 3. Marketing, Research, & Analytics
 Workpaper: 1IN003.000 - Marketing Research & Analytics

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
Explanation: Rate Education & Outreach: Provide communications on rate reform and conduct research to measure effectiveness. Using an integrated mix of mass media, direct mail, email, online, social media, and in the bill package to build awareness and understanding as well as to offer various services as needed. Customer research will be used to measure effectiveness and refine messaging specific to the communications activity requested on this topic of rate reform. Due to timing, full amount of authorized funding of \$2 million was not spent in 2016.								
2018	Other	0	70	0	70	0.0	1-Sided Adj	CSCHRAMM20170309172253880
Explanation: Marketing Automation: Software/licensing costs for the tracking and gathering of information related to digital activity.								
2018	Other	0	64	0	64	0.0	1-Sided Adj	CSCHRAMM20170309172315560
Explanation: Outage Communication: Outage map enterprise license. Google Maps requires an enterprise license to host SDG&E's Outage Map due to traffic far exceeding the free threshold of 25,000 external page views per day at no cost.								
2018	FOF-Ongoing	0	-463	0	-463	0.0	1-Sided Adj	CSCHRAMM20170309172400280
Explanation: Business Optimization (FOF): Non-labor benefits such as consolidating advertising and contracting/procurement efficiencies.								
2018 Total		0	1,371	0	1,371	0.0		
2019	Other	0	1,700	0	1,700	0.0	1-Sided Adj	CSCHRAMM20170309173018053
Explanation: Rate Education & Outreach: Provide communications on rate reform and conduct research to measure effectiveness. Using an integrated mix of mass media, direct mail, email, online, social media, and in the bill package to build awareness and understanding as well as to offer various services as needed. Customer research will be used to measure effectiveness and refine messaging specific to the communications activity requested on this topic of rate reform. Due to timing, full amount of authorized funding of \$2 million was not spent in 2016.								
2019	Other	0	70	0	70	0.0	1-Sided Adj	CSCHRAMM20170309173129697
Explanation: Marketing Automation: Software/licensing costs for the tracking and gathering of information related to digital activity.								
2019	Other	0	72	0	72	0.0	1-Sided Adj	CSCHRAMM20170309173208950
Explanation: Outage Communication: Outage map enterprise license. Google Maps requires an enterprise license to host SDG&E's Outage Map due to traffic far exceeding the free threshold of 25,000 external page views per day at no cost.								
2019	Other	0	185	0	185	0.0	1-Sided Adj	CSCHRAMM20170309173535027

Note: Totals may include rounding differences.

SDG&E/CS - INFORMATION & TECHNOLOGIES/Exh No:SDG&E-19-WP/Witness: L. Davidson

San Diego Gas & Electric Company
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Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 3. Marketing, Research, & Analytics
 Workpaper: 1IN003.000 - Marketing Research & Analytics

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
Explanation:		Customer Insight Surveys: 1) Disability Needs Assessment Survey - \$70k (identify needs of vision and hearing challenged customers, identify communications, and engagement preferences). 2) Multicultural and Language Survey - \$115k (understand cultural and linguistic differences that influence perceptions, behaviors, and communication preferences in order to effectively market critical information and relevant solutions to this customer segment).						
2019	Other	0	450	0	450	0.0	1-Sided Adj	CSCHRAMM20170309173633880
Explanation:		Multicultural Campaign: Mass communications using ethnic and multi-cultural channels to provide information on customer services available. This campaign leverages the Multicultural and Language Survey. Includes using various communications channels such as newspaper ads, emails, and digital ads to promote available customer services such as bill payment assistance, appliance safety checks, Level Pay, etc. to create awareness of these services to traditionally hard-to-reach customers. Cost is based on historical costs for using these types of channels and then estimated to having the messaging in market for between nine to 10 months a year, plus creation of materials.						
2019	Other	0	250	0	250	0.0	1-Sided Adj	CSCHRAMM20170309173753317
Explanation:		Contact Info Campaign: Communications to encourage customers to provide contact information which can be used in a variety of future communications. This effort would use various offers to encourage customers to provide updated contact information (email address, cell phone for both call and text) to allow for more effective and efficient communications on critical topics such as outage information, safety messaging (e.g. appliance checks), and offering relevant solutions. Costs are for the communications to promote people going to the SDG&E preference center to provide the requested information.						
2019	RAMP Incremental	0	100	0	100	0.0	1-Sided Adj	CSCHRAMM20170626162726193
Explanation:		RAMP: RAMP Incremental SDG&E Chapter 3 - Employee Contractor and Public Safety. Mitigation: Customer Communications and First Responder Training. Mitigation Program: Summer/Winter Prep Campaigns. Expansion of existing summer and winter season messaging pertaining to the importance of safe energy use and changes that occur during the seasons by increasing radio media exposure and additional email sent to selected target audiences.						
2019	FOF-Ongoing	0	-472	0	-472	0.0	1-Sided Adj	CSCHRAMM20170309173836570
Explanation:		Business Optimization (FOF): Non-labor benefits such as consolidating advertising and contracting/procurement efficiencies.						
2019 Total		0	2,355	0	2,355	0.0		

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
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Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson
Category: A. Customer Service Information
Category-Sub: 3. Marketing, Research, & Analytics
Workpaper: 1IN003.000 - Marketing Research & Analytics

Determination of Adjusted-Recorded (Incurred Costs):

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
Recorded (Nominal \$)*					
Labor	2,169	2,127	2,082	2,229	2,670
Non-Labor	5,854	6,033	4,877	4,728	2,972
NSE	0	0	0	0	0
Total	8,023	8,160	6,959	6,957	5,642
FTE	23.7	22.9	21.6	22.3	26.0
Adjustments (Nominal \$) **					
Labor	-168	-10	-13	0	0
Non-Labor	216	168	-26	0	134
NSE	0	0	0	0	0
Total	48	157	-39	0	134
FTE	-1.8	-0.2	-0.2	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	2,001	2,117	2,069	2,229	2,670
Non-Labor	6,070	6,201	4,851	4,728	3,107
NSE	0	0	0	0	0
Total	8,071	8,318	6,920	6,957	5,776
FTE	21.9	22.7	21.4	22.3	26.0
Vacation & Sick (Nominal \$)					
Labor	290	336	330	344	443
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	290	336	330	344	443
FTE	3.5	4.0	3.8	3.9	4.7
Escalation to 2016\$					
Labor	212	170	113	61	0
Non-Labor	155	80	5	8	0
NSE	0	0	0	0	0
Total	368	250	118	69	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2016\$)					
Labor	2,504	2,623	2,513	2,635	3,112
Non-Labor	6,225	6,281	4,856	4,736	3,107
NSE	0	0	0	0	0
Total	8,729	8,904	7,369	7,371	6,219
FTE	25.4	26.7	25.2	26.2	30.7

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

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Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 3. Marketing, Research, & Analytics
 Workpaper: 1IN003.000 - Marketing Research & Analytics

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	-168	-10	-13	0	0
Non-Labor	216	168	-26	0	134
NSE	0	0	0	0	0
Total	48	157	-39	0	134
FTE	-1.8	-0.2	-0.2	0.0	0.0

Detail of Adjustments to Recorded:

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
2012	Other	-122	-4	0	-1.2	CCTR Transf To 2100-3839.000	CSCHRAMM20161012142129017
Explanation: Transfer labor, FTE, and associated non-labor for Customer Experience Advisor function from cost center 2100-3593 in work paper group 1IN003 Marketing, Research, & Analytics to cost center 2100-3839 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2012	Other	-68	-2	0	-0.7	CCTR Transf To 2100-3576.000	CSCHRAMM20161012142543497
Explanation: Transfer labor, FTE, and associated non-labor for Project Manager function from cost center 2100-3593 in work paper group 1IN003 Marketing, Research, & Analytics to cost center 2100-3576 in work paper group 100008 Customer Operations Support and Projects to align costs where activity/function resides.							
2012	Other	-67	0	0	-0.8	CCTR Transf To 2100-4027.000	CSCHRAMM20161012143617423
Explanation: Transfer labor and FTE for Outreach Energy Solutions Advisor from cost center 2100-3446 in work paper group 1IN003 Marketing, Research, & Analytics to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2012	Other	0	112	0	0.0	CCTR Transf From 2100-0650.000	CSCHRAMM20161016152202360
Explanation: Transfer non-labor costs for brochures/fulfillment from cost center 2100-0650 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3593 in work paper group 1IN003 Marketing, Research, & Analytics to align costs where activity/function resides.							
2012	Other	89	0	0	0.9	CCTR Transf From 2100-0040.000	CSCHRAMM20161011151102840
Explanation: Transfer Sr. Research Analyst labor and FTE from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3168 work paper group 1IN003 Marketing, Research, & Analytics to align costs where function/activity resides.							
2012	Other	0	90	0	0.0	CCTR Transf From 2100-0040.000	CSCHRAMM20161011151314443
Explanation: Transfer non-labor contractor costs associated with segmentation research from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3168 in work paper group 1IN003 Marketing, Research, & Analytics to align costs where activity resides.							

Note: Totals may include rounding differences.

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Area: CS - INFORMATION & TECHNOLOGIES
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 Category: A. Customer Service Information
 Category-Sub: 3. Marketing, Research, & Analytics
 Workpaper: 1IN003.000 - Marketing Research & Analytics

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2012	Other	0	20	0	0.0	CCTR Transf From 2100-3777.000	CSCHRAMM20161016193402087
Explanation: Transfer non-labor costs for brochures/fulfillment from 2100-3777 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to 2100-3593 in work paper group 1IN003 Marketing, Research, & Analytics to align costs where activity/function resides.							
2012 Total		-168	216	0	-1.8		
2013	Other	0	81	0	0.0	CCTR Transf From 2100-0040.000	CSCHRAMM20161011151438100
Explanation: Transfer non-labor contractor costs associated with segmentation research from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3168 in work paper group 1IN003 Marketing, Research, & Analytics to align costs where activity resides.							
2013	Other	-66	0	0	-0.8	CCTR Transf To 2100-4027.000	CSCHRAMM20161012144955190
Explanation: Transfer labor and FTE for Outreach Energy Solutions Advisor from cost center 2100-3593 in work paper group 1IN003 Communications, Marketing, Research & Web to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2013	Other	0	-60	0	0.0	CCTR Transf To 2100-0019.000	CSCHRAMM20161012145206283
Explanation: Transfer non-labor costs associated with Live Chat from cost center 2100-3167 in work paper group 1IN003 Marketing, Research, & Analytics to cost center 2100-0019 in work paper group 1OO007 CCC Support to align costs where activity/function resides.							
2013	Other	56	0	0	0.6	CCTR Transf From 2100-4027.000	CSCHRAMM20161012130213737
Explanation: Transfer Sr. Research Analyst labor and FTE from cost center 2100-4027 in work paper group 1IN001 Residential Services to cost center to 2100-3168 in work paper group 1IN003 Marketing, Research & Analytics to align costs where function/activity resides.							
2013	Other	0	139	0	0.0	CCTR Transf From 2100-0650.000	CSCHRAMM20161016195433620
Explanation: Transfer non-labor costs for brochures/fulfillment from cost center 2100-0650 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3593 in work paper group 1IN003 Marketing, Research & Analytics to align costs where activity/function resides.							
2013	Other	0	7	0	0.0	CCTR Transf From 2100-3777.000	CSCHRAMM20161016203221483
Explanation: Transfer non-labor costs for brochures/fulfillment from cost center 2100-3777 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3593 in work paper group 1IN003 Marketing, Research & Analytics to align costs where activity/function resides.							
2013 Total		-10	168	0	-0.2		
2014	Other	-13	0	0	-0.2	CCTR Transf To 2100-4027.000	CSCHRAMM20161012145500693

Note: Totals may include rounding differences.

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Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 3. Marketing, Research, & Analytics
 Workpaper: 1IN003.000 - Marketing Research & Analytics

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
Explanation: Transfer labor and FTE for Outreach Energy Solutions Advisor from cost center 2100-3593 in work paper group 1IN003 Marketing, Research & Analytics to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2014	Other	0	-26	0	0.0	CCTR Transf To 2100-0019.000	CSCHRAMM20161012145626680
Explanation: Transfer non-labor costs associated with Live Chat from cost center 2100-3167 in work paper group 1IN003 Marketing, Research, & Analytics to cost center 2100-0019 in work paper group 1OO007 CCC Support to align costs where activity/function resides.							
2014 Total		-13	-26	0	-0.2		
2015 Total		0	0	0	0.0		
2016	Other	0	103	0	0.0	CCTR Transf From 2100-3480.000	CSCHRAMM20170223133653817
Explanation: Transfer non-labor costs associated with Rate Reform Education (personalized video bills) from cost center 2100-3480 in work paper group 1OO002 Billing to cost center 2100-0058 in work paper group 1IN003 Marketing, Research & Analytics, to align function/activity where it resides.							
2016	Other	0	31	0	0.0	CCTR Transf From 2100-0004.000	CSCHRAMM20170222154511827
Explanation: Transfer non-labor costs associated with marketing from cost center 2100-0004 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-0058 in work paper group 1IN003 Marketing, Research & Analytics to align costs where function/activity resides.							
2016 Total		0	134	0	0.0		

Note: Totals may include rounding differences.

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Area: CS - INFORMATION & TECHNOLOGIES
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 Category-Sub: 3. Marketing, Research, & Analytics
 Workpaper: 11N003.000 - Marketing Research & Analytics

RAMP Item # 1

Ref ID: CSCHRAMM20170508192407553

RAMP Chapter: SDG&E-3

Program Name: Emergency Prep Communications; Summer/Winter Prep Campaign

Program Description: Emergency Prep: A general communications effort mainly concentrated in the High risk fire area, but reaching beyond this service area with information about preparing for emergencies. Summer/Winter Prep Campaign - Bill inserts, print, radio, web, social media. Messages include Carbon Monoxide Safety, Fumigations, furnace, etc.

Risk/Mitigation:

Risk: Employee, Contractor and Public Safety

Mitigation: Customer Communications and First Responder Training

Forecast CPUC Cost Estimates (\$000)

	<u>2017</u>	<u>2018</u>	<u>2019</u>
Low	532	532	532
High	638	638	638

Funding Source: CPUC-GRC

Forecast Method: Base Year

Work Type: Non-Mandated

Work Type Citation: N/A

Historical Embedded Cost Estimates (\$000)

Embedded Costs: 455

Explanation: IO 200404182 Emergency Prep Communications \$155K; IO 404401 Summer/Winter Prep Campaigns \$300K

Beginning of Workpaper
1IN004.000 - Customer Programs Pricing and Other Office

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Area: CS - INFORMATION & TECHNOLOGIES
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 Category: A. Customer Service Information
 Category-Sub: 4. Customer Programs, Pricing, and Other Office
 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

Activity Description:

Customer Programs, Pricing, and other Office consists of three key subgroups; Customer Assistance Programs, Customer Solutions, and Customer Pricing. Additionally, it also contains the Vice President of Customer Services who provides oversight and leadership for all Customer Services activities. These groups are collectively responsible for analytical, technical and regulatory support, for investigation, selection, and development of value-added customer solutions as well as Rate Design, Strategy, Electric Load Analysis, and Demand forecasting.

Forecast Explanations:

Labor - Base YR Rec

A base year forecasting method for labor and non-labor was used for TY2019 Customer Programs, Pricing, and Other office because the last recorded year accurately reflects the expense level associated with current departmental activity. The Customer Pricing group continues to expand to perform numerous rate related activities that result from increasing legislative and regulatory requirements, rate analysis and development of rate options. Therefore, the base year provides a reasonable starting point for future expenditures.

Non-Labor - Base YR Rec

See above.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		3,780	4,072	4,580	4,398	4,263	4,396	4,706	4,706	
Non-Labor		2,439	2,438	1,443	984	963	1,575	1,662	1,700	
NSE		0	0	0	0	0	0	0	0	
Total		6,219	6,511	6,023	5,382	5,226	5,971	6,368	6,406	
FTE		39.8	41.5	45.9	44.3	41.9	43.8	46.6	46.6	

Note: Totals may include rounding differences.

San Diego Gas & Electric Company
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Area: CS - INFORMATION & TECHNOLOGIES
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 Category: A. Customer Service Information
 Category-Sub: 4. Customer Programs, Pricing, and Other Office
 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

Summary of Adjustments to Forecast:

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	Base YR Rec	4,263	4,263	4,263	133	443	443	4,396	4,706	4,706
Non-Labor	Base YR Rec	963	963	963	611	698	736	1,574	1,661	1,699
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		5,226	5,226	5,226	744	1,141	1,179	5,970	6,367	6,405
FTE	Base YR Rec	42.0	42.0	42.0	1.7	4.5	4.5	43.7	46.5	46.5

Forecast Adjustment Details:

Year	Adj Group	Labor	NLbr	NSE	Total	FTE	Adj Type	RefID	
2017	Other	156	469	0	625	2.0	1-Sided Adj	CSCHRAMM20170308164915563	
Explanation:		Customer Pricing Rate Support - Full Year Labor & Non-Labor impact: Full year impact of 2016 labor vacancies/leaves; Full year impact of 2016 non-labor Dynamic Pricing Measurement and Evaluation (M&E) Load Impact studies due to a mid-year to mid-year annual cycle for these studies.							
2017	Other	0	23	0	23	0.0	1-Sided Adj	CSCHRAMM20170308165145090	
Explanation:		Medical Baseline (MBL) Recertification Process and Related System Enhancements: Incremental non-labor costs of \$23k for increased vendor fees related to MBL recertification letter process of \$13K and \$10K for MBL system maintenance and enhancements in support of the recertification process.							
2017	Other	0	20	0	20	0.0	1-Sided Adj	CSCHRAMM20170308212335507	
Explanation:		Neighbor to Neighbor (NTN) System enhancements: System enhancements for NTN data base move to Energy Efficiency Collaboration Platform (EECP). Calculation: \$60K / 3 = \$20K 1/3 of the total cost spread over the 3 yr GRC cycle.							
2017	RAMP Incremental	0	99	0	99	0.0	1-Sided Adj	CSCHRAMM20170308171553607	
Explanation:		RAMP: RAMP Incremental SDG&E Chapter 3 Employee Contractor and Public Safety Mitigation: Customer Orders Relative to Public Safety Mitigation Program: Natural Gas Appliance Testing (NGAT) Energy Savings Assistance (ESA) homes treated goal in 2017 of 20,316 per decision D.16-11-022 . Forecasted 33% of homes treated goal receive NGAT. Calculation: 2017 homes treated goal 20,316 forecasted NGAT 33% of homes treated goal (20,316 x 33% = 6,704 NGAT) 6,704 x \$36.75 per test = \$246,382 2016 Base Year (BY) expenses \$147,300 2017 forecast \$246,382 - \$147,300 2016 BY = \$99,082 incremental							
2017	FOF-Ongoing	-23	0	0	-23	-0.3	1-Sided Adj	CSCHRAMM20170308215037723	
Explanation:		Business Optimization (FOF): Labor benefits such as reducing or streamling reporting.							

Note: Totals may include rounding differences.

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Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 4. Customer Programs, Pricing, and Other Office
 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>	<u>RefID</u>	
2017 Total		133	611	0	744	1.7			
2018	Other	156	469	0	625	2.0	1-Sided Adj	CSCHRAMM20170308215503990	
Explanation:		Customer Pricing Rate Support - Full Year Labor & Non-Labor impact: Full year impact of 2016 labor vacancies/leaves; Full year impact of 2016 non-labor Dynamic Pricing Measurement and Evaluation (M&E) Load Impact studies due to a mid-year to mid-year annual cycle for these studies.							
2018	Other	332	9	0	341	3.0	1-Sided Adj	CSCHRAMM20170308215544367	
Explanation:		Customer Pricing Regulatory Compliance: 3 FTE s \$332K and associated non-labor of \$9K required due to increasing legislative and regulatory requirements regarding the analysis and development of rate options. This includes increasing number of regulatory filings requiring rate design proposals and increasing scope in development of regulatory filings related to rate design including new incremental cost studies requirements, increasing requirements related to analysis of customer bill impacts including population level bill impacts and greater level of customer segmentation to support these regulatory requirements, and increasing requirements related to customer load information to support regulatory filings including more segmented analysis (i.e., NEM, EV, other advanced technologies). Calculation: \$332k Labor 1 FTE \$115k Project Mgr II (MRR: PM2) 1 FTE \$115k Advisor (MRR: AD3)) 1 FTE \$102k Advisor (MRR: AD2) Non-Labor: \$3k per FTE							
2018	Other	0	94	0	94	0.0	1-Sided Adj	CSCHRAMM20170308215610617	
Explanation:		Medical Baseline (MBL) Recertification Process and Related System Enhancements: Incremental non-labor costs of \$94k for increased vendor fees related to recertification letter process of \$16K and \$78K for MBL system maintenance and enhancements in support of the recertification process.							
2018	Other	0	20	0	20	0.0	1-Sided Adj	CSCHRAMM20170308215637180	
Explanation:		Neighbor to Neighbor (NTN) System enhancements: System enhancements for NTN data base move to Energy Efficiency Collaboration Platform (EECP). Calculation: \$60K / 3 = \$20K 1/3 of the total cost spread over the 3-yr GRC cycle.							
2018	RAMP Incremental	0	106	0	106	0.0	1-Sided Adj	CSCHRAMM20170308215711440	

Note: Totals may include rounding differences.

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Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 4. Customer Programs, Pricing, and Other Office
 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
Explanation: RAMP: RAMP Incremental SDG&E Chapter 3 Employee Contractor and Public Safety Mitigation: Customer Orders Relative to Public Safety Mitigation Program: Natural Gas Appliance Testing (NGAT) Energy Savings Assistance (ESA) homes treated goal in 2018 of 20,316 per decision D.16-11-022 . Forecasted 33% of homes treated goal receive NGAT. Calculation: 2018 homes treated goal 20,316 forecasted NGAT 33% of homes treated goal (20,316 x 33% = 6,704 NGAT) 6,704 x \$37.85 per test = \$253,757 2016 Base Year (BY) expenses \$147,300 2018 forecast \$253,757 - \$147,300 2016 BY = \$106,457 incremental								
2018	FOF-Ongoing	-45	0	0	-45	-0.5	1-Sided Adj	CSCHRAMM20170308220248307
Explanation: Business Optimization (FOF): Labor benefits such as reducing or streamling reporting.								
2018 Total		443	698	0	1,141	4.5		
2019	Other	156	469	0	625	2.0	1-Sided Adj	CSCHRAMM20170308220326770
Explanation: Customer Pricing Rate Support - Full Year Labor & Non-Labor impact: Full year impact of 2016 labor vacancies/leaves; Full year impact of 2016 non-labor Dynamic Pricing Measurement and Evaluation (M&E) Load Impact studies due to a mid-year to mid-year annual cycle for these studies.								
2019	Other	332	9	0	341	3.0	1-Sided Adj	CSCHRAMM20170308220357570
Explanation: Customer Pricing Regulatory Compliance: 3 FTE s \$332K and associated non-labor of \$9K required due to increasing legislative and regulatory requirements regarding the analysis and development of rate options. This includes increasing number of regulatory filings requiring rate design proposals and increasing scope in development of regulatory filings related to rate design including new incremental cost studies requirements, increasing requirements related to analysis of customer bill impacts including population level bill impacts and greater level of customer segmentation to support these regulatory requirements, and increasing requirements related to customer load information to support regulatory filings including more segmented analysis (i.e., NEM, EV, other advanced technologies). Calculation: \$332k Labor 1 FTE \$115k Project Mgr II (MRR: PM2) 1 FTE \$115k Advisor (MRR: AD3)) 1 FTE \$102k Advisor (MRR: AD2) Non-Labor: \$3k per FTE								
2019	Other	0	97	0	97	0.0	1-Sided Adj	CSCHRAMM20170308220423557
Explanation: Medical Baseline (MBL) Recertification Process and Related System Enhancements: Incremental non-labor costs of \$97k for increased vendor fees related to recertification letter process of \$19K and \$78K for MBL system maintenance and enhancements in support of the recertification process.								

Note: Totals may include rounding differences.

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Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 4. Customer Programs, Pricing, and Other Office
 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj_Type</u>	<u>RefID</u>
2019	Other	0	20	0	20	0.0	1-Sided Adj	CSCHRAMM20170308220445730
Explanation: Neighbor to Neighbor (NTN) System enhancements: System enhancements for NTN data base move to Energy Efficiency Collaboration Platform (EECP). Calculation: \$60K / 3 = \$20K 1/3 of the total cost spread over the 3-yr GRC cycle.								
2019	RAMP Incremental	0	141	0	141	0.0	1-Sided Adj	CSCHRAMM20170308220630323
Explanation: RAMP: RAMP Incremental Chapter 3 Employee Contractor and Public Safety Mitigation: Customer Orders Relative to Public Safety Mitigation Program: Natural Gas Appliance Testing (NGAT) Energy Savings Assistance (ESA) homes treated goal in 2019 of 22,398 per decision D.16-11-022 . Forecasted 33% of homes treated goal receive NGAT. Calculation: 2019 homes treated goal 22,398 forecasted NGAT 33% of homes treated goal (22,398 x 33% = 7,391 NGAT) 7,391 x \$38.99 per test = \$288,188 2016 Base Year (BY) expenses \$147,300 2019 forecast \$288,188 - \$147,300 2016 BY = \$140,888 incremental								
2019	FOF-Ongoing	-45	0	0	-45	-0.5	1-Sided Adj	CSCHRAMM20170308221136593
Explanation: Business Optimization (FOF): Labor benefits such as reducing or streamling reporting.								
2019 Total		443	736	0	1,179	4.5		

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Determination of Adjusted-Recorded (Incurred Costs):

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
Recorded (Nominal \$)*					
Labor	3,011	3,338	3,901	4,584	3,784
Non-Labor	2,652	1,700	834	1,223	1,345
NSE	0	0	0	0	0
Total	5,662	5,038	4,735	5,807	5,130
FTE	35.0	36.9	40.7	38.4	36.1
Adjustments (Nominal \$) **					
Labor	11	-51	-128	-863	-128
Non-Labor	-273	707	607	-241	-382
NSE	0	0	0	0	0
Total	-263	656	478	-1,104	-510
FTE	-0.8	-1.6	-1.8	-0.6	-0.5
Recorded-Adjusted (Nominal \$)					
Labor	3,021	3,287	3,772	3,721	3,656
Non-Labor	2,378	2,407	1,441	982	963
NSE	0	0	0	0	0
Total	5,400	5,694	5,213	4,703	4,619
FTE	34.2	35.3	38.9	37.8	35.6
Vacation & Sick (Nominal \$)					
Labor	438	521	602	575	607
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	438	521	602	575	607
FTE	5.5	6.2	7.0	6.6	6.5
Escalation to 2016\$					
Labor	321	264	206	102	0
Non-Labor	61	31	2	2	0
NSE	0	0	0	0	0
Total	381	295	207	104	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2016\$)					
Labor	3,780	4,072	4,580	4,398	4,263
Non-Labor	2,439	2,438	1,443	984	963
NSE	0	0	0	0	0
Total	6,219	6,511	6,023	5,382	5,226
FTE	39.7	41.5	45.9	44.4	42.1

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

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 Category-Sub: 4. Customer Programs, Pricing, and Other Office
 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs						
Years	2012	2013	2014	2015	2016	
Labor	11	-51	-128	-863	-128	
Non-Labor	-273	707	607	-241	-382	
NSE	0	0	0	0	0	
Total	-263	656	478	-1,104	-510	
FTE	-0.8	-1.6	-1.8	-0.6	-0.5	

Detail of Adjustments to Recorded:

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
2012	Other	-117	-21	0	-0.9	CCTR Transf To 2200-2059.001	CSCHRAMM20161016112331657
Explanation: Transfer labor, FTE, and non-labor costs associated with SoCalGas RD&D Project Manager function from cost center 2100-4018 in work group 11N004 (Customer Programs, Pricing and Other Office) to SoCalGas cost center 2200-2059.001 in work group 2RD001 (CS - Technologies RDD) to align costs where function resides. Reference internal orders: 7025532, 7043704							
2012	Other	0	-15	0	0.0	CCTR Transf To 2100-4027.000	CSCHRAMM20161016151842013
Explanation: Transfer Outreach non-labor costs from cost center 2100-0630 in work paper group 11N004 Customer Programs, Pricing, and Other Office to cost center 2100-4027 in work paper group 11N001 Residential Services to align costs where activity/function resides.							
2012	Other	210	29	0	1.9	CCTR Transf From 2100-0040.000	CSCHRAMM20161011150610827
Explanation: Transfer Products Svcs Mgr and Project Manager labor, FTE, and associated non-labor costs from cost center 2100-0040 in work paper group 11N001 Residential Services to cost center 2100-3841 in work paper group 11N004 Customer Programs, Pricing, and Other Office to align costs where function/activity resides.							
2012	Other	-42	-75	0	-0.9	1-Sided Adj	CSCHRAMM20161016152017300
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2012	Other	0	-112	0	0.0	CCTR Transf To 2100-3593.000	CSCHRAMM20161016152202360
Explanation: Transfer non-labor costs for brochures/fulfillment from cost center 2100-0650 in work paper group 11N004 Customer Programs, Pricing, and Other Office to cost center 2100-3593 in work paper group 11N003 Marketing, Research, & Analytics to align costs where activity/function resides.							
2012	Other	-1	-1	0	0.0	1-Sided Adj	CSCHRAMM20161016154608007
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							

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 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2012	Other	-45	0	0	-0.9	1-Sided Adj	CSCHRAMM20161016154804213
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2012	Other	0	-52	0	0.0	CCTR Transf To 2100-4027.000	CSCHRAMM20161016154911463
Explanation: Transfer Outreach (2-1-1) non-labor costs from cost center 2100-3454 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2012	Other	98	0	0	0.9	CCTR Transf From 2100-3584.000	CTRINH20161116081741073
Explanation: Adjustment Due To Re-Org Of Service Order Routing Technology (SORT) Team. Transfer CSF Support labor and FTE from cost center 2100-3584 in work paper group 1FC004.000 CSF Support to cost center 2100-0643 in 1IN004.000 Customer Programs, Pricing, and Other Office to align historical costs where activity/function resides.							
2012	Other	-39	-1	0	-0.4	CCTR Transf To 2100-0712.000	CSCHRAMM20161016192558240
Explanation: Transfer Business Planning Sr. Business Analyst II labor, FTE, and associated non-labor costs from cost center 2100-3455 in work paper group 1IN004 Customer Programs Pricing and Other Office to cost center 2100-0712 in work paper group 1AG001 Planning and Reg Accounts to align costs where Business Planning activity/function resides.							
2012	Other	-41	-24	0	-0.3	CCTR Transf To 2100-0634.000	CSCHRAMM20161016192819453
Explanation: Transfer Business Services Mkts. Mgr. labor, FTE, and associated non-labor from cost center 2100-3579 in work paper group 1IN004 Customer Programs, Pricing and Other Office to cost center 2100-0634 in work paper group 1IN002 Business Services to align costs where activities/functions resides.							
2012	Other	0	0	0	0.0	1-Sided Adj	CSCHRAMM20161016192933620
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2012	Other	0	43	0	0.0	1-Sided Adj	CSCHRAMM20161016193225303
Explanation: Exclude Refundable Energy Efficiency credit reference IO: IO 200315904 / 7062311							
2012	Other	0	-20	0	0.0	CCTR Transf To 2100-3593.000	CSCHRAMM20161016193402087
Explanation: Transfer non-labor costs for brochures/fulfillment from 2100-3777 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to 2100-3593 in work paper group 1IN003 Marketing, Research, & Analytics to align costs where activity/function resides.							
2012	Other	-3	0	0	0.0	1-Sided Adj	CSCHRAMM20161016193526493
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							

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 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2012	Other	0	-26	0	0.0	1-Sided Adj	CSCHRAMM20161016202507383
Explanation: Exclude expense associated with incorrect accounting posted in 2012 and corrected/reversed in 2013. Reference IO 7048126 and cost element 6230820.							
2012	Other	-11	0	0	-0.2	CCTR Transf To 2100-0707.000	CSCHRAMM20161017140953743
Explanation: Transfer facilities AV Maintenance Ops Specialist labor and FTE from cost center 2100-3776 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-0707 in work paper group 1RE001 SDG&E Facilities Operations to align costs where function/activity resides. Reference IO 7053300.							
2012 Total		11	-273	0	-0.8		
2013	Other	0	-438	0	0.0	1-Sided Adj	CSCHRAMM20161012130745540
Explanation: One-sided adjustment to remove one-time non-recurring third party development costs for a customer engagement multi-channel platform to deliver energy insight to targeted customr groups. (Manage Act Save).							
2013	Other	225	8	0	2.0	CCTR Transf From 2100-0040.000	CSCHRAMM20161011151658700
Explanation: Transfer Products Svcs Mgr and Project Manager labor, FTE, and associated non-labor costs from cost center 2100-0040 in work paper group 1IN001 Residential Servies to cost center 2100-3841 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to align costs where function/activity resides.							
2013	Other	0	918	0	0.0	CCTR Transf From 2100-0040.000	CSCHRAMM20161011151826253
Explanation: Transfer non-labor costs associated with Manage Act Save Program from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3841 in work paper group 1IN004 Customer Programs, Projects, Pricing, and Other Office to align costs where activity resides.							
2013	Other	-6	-12	0	-0.1	CCTR Transf To 2200-2059.001	CSCHRAMM20161016112408510
Explanation: Transfer labor/FTE and non-labor costs associated with SoCalGas RD&D Project Manager function from cost center 2100-4018 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to SoCalGas cost center 2200-2059.001 in work paper group 2RD001 CS - Technologies RD&D to align costs where function resides. Reference internal orders: 7025532, 7043704							
2013	Other	0	-3	0	0.0	1-Sided Adj	CSCHRAMM20161016195222987
Explanation: Transfer Customer Privacy non-labor costs from cost center 2100-0064 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3880 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2013	Other	0	426	0	0.0	1-Sided Adj	CSCHRAMM20161016195314400
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2013	Other	0	-139	0	0.0	CCTR Transf To 2100-3593.000	CSCHRAMM20161016195433620

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 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
Explanation: Transfer non-labor costs for brochures/fulfillment from cost center 2100-0650 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3593 in work paper group 1IN003 Marketing, Research & Analytics to align costs where activity/function resides.							
2013	Other	0	-1	0	0.0	1-Sided Adj	CCHRAMM20161016195543530
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2013	Other	101	0	0	0.9	CCTR Transf From 2100-3584.000	CTRINH20161116081846980
Explanation: Adjustment Due To Re-Org Of SORT Team. Transfer CSF Support labor and FTE from cost center 2100-3584 in work paper group 1FC004.000 CSF Support to cost center 2100-0643 in work paper group 1IN004.000 Customer Programs, Pricing, and Other Office to align historical costs where activity/function resides.							
2013	Other	-49	0	0	-1.0	1-Sided Adj	CCHRAMM20161016195650997
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2013	Other	0	-56	0	0.0	CCTR Transf To 2100-4027.000	CCHRAMM20161016195746780
Explanation: Transfer Outreach (2-1-1) non-labor costs from cost center 2100-3454 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2013	Other	-116	-2	0	-1.3	CCTR Transf To 2100-0712.000	CCHRAMM20161016195914120
Explanation: Transfer Business Planning Principal Business Analyst and Sr. Business Analyst II labor/FTE and associated non-labor costs from cost center 2100-3455 in work paper group 1IN004 Customer Programs Pricing and Other Office to cost center 2100-0712 in work paper group 1AG001 Planning and Reg Accounts to align costs where Business Planning activity/function resides.							
2013	Other	-101	0	0	-0.9	CCTR Transf To 2100-3518.000	CCHRAMM20161016200603567
Explanation: Transfer Customer Contact Center Support - Project Manager II labor, FTE, and associated non-labor costs from cost center 2100-3455 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3518 in work paper group 1OO007 CCC Support to align costs where CCC Project Manager activity/function resides.							
2013	Other	-13	-12	0	-0.1	CCTR Transf To 2100-0634.000	CCHRAMM20161016200913367
Explanation: Transfer Business Services Mkts. Mgr. and Program Analyst labor, FTE, and associated non-labor from cost center 2100-3579 in work paper group 1IN004 Customer Programs, Pricing and Other Office to cost center 2100-0634 in work paper group 1IN002 Business Services to align costs where activities/functions resides.							
2013	Other	0	0	0	0.0	1-Sided Adj	CCHRAMM20161016202754523
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							

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<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2013	Other	0	26	0	0.0	1-Sided Adj	CSCHRAMM20161016202835487
Explanation: Exclude credit associated with incorrect accounting posted in 2012 and corrected/reversed in 2013. Reference IO 7048126 and cost element 6230820.							
2013	Other	-61	0	0	-0.5	CCTR Transf To 2200-2059.001	CSCHRAMM20161016203042013
Explanation: Transfer SoCalGas RD&D Labor and non-labor costs (reference SoCalGas Billing IO 7043704) from 2100-3776 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to 2200-2059.001 in work paper group 2RD001 CS Technologies RD&D to align costs where SoCalGas RD&D activity/function resides.							
2013	Other	0	-7	0	0.0	CCTR Transf To 2100-3593.000	CSCHRAMM20161016203221483
Explanation: Transfer non-labor costs for brochures/fulfillment from cost center 2100-3777 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3593 in work paper group 1IN003 Marketing, Research & Analytics to align costs where activity/function resides.							
2013	Other	-30	-1	0	-0.6	1-Sided Adj	CSCHRAMM20161016203328843
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2013 Total		-51	707	0	-1.6		
2014	Other	0	497	0	0.0	CCTR Transf From 2100-0040.000	CSCHRAMM20161011155149100
Explanation: Transfer non-labor costs associated with Manage Act Save Program from cost center 2100-0040 in work paper group 1IN001 Residential Services to cost center 2100-3841 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to align costs where activity resides.							
2014	Other	-2	-6	0	0.0	CCTR Transf To 2200-2059.001	CSCHRAMM20161016112445770
Explanation: Transfer labor, FTE, and non-labor costs associated with SoCalGas RD&D Project Manager function from cost center 2100-4018 in work paper group 1IN004 Customer Programs, Pricing and Other Office to SoCalGas cost center 2200-2059.001 in work paper group 2RD001 CS - Technologies RD&D to align costs where function resides. Reference internal orders: 7025532, 7043704							
2014	Other	0	127	0	0.0	1-Sided Adj	CSCHRAMM20161016203435940
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2014	Other	-54	0	0	-1.0	1-Sided Adj	CSCHRAMM20161016203529673
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2014	Other	0	-10	0	0.0	CCTR Transf To 2100-4027.000	CSCHRAMM20161016203630547

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 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
Explanation: Transfer Outreach (2-1-1) non-labor costs from cost center 2100-3454 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-4027 in work paper group 1IN001 Residential Services to align costs where activity/function resides.							
2014	Other	-61	-1	0	-0.6	CCTR Transf To 2100-0712.000	CSCHRAMM20161016203824613
Explanation: Transfer Business Planning Principal Business Analyst and Sr. Business Analyst II labor, FTE, and associated non-labor costs from cost center 2100-3455 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-0712 in work paper group 1AG001 Planning and Reg Accounts to align costs where Business Planning activity/function resides.							
2014	Other	-68	0	0	-0.6	CCTR Transf To 2100-3518.000	CSCHRAMM20161016204004613
Explanation: Transfer Customer Contact Center Support - Project Manager II labor, FTE, and associated non-labor costs from 2100-3455 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3518 in work paper group 1OO007 CCC Support to align costs where CCC Project Manager activity/function resides.							
2014	Other	-9	0	0	-0.2	1-Sided Adj	CSCHRAMM20161016204626870
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2014	Other	-16	0	0	-0.1	CCTR Transf To 2200-2059.001	CSCHRAMM20161016204802310
Explanation: Transfer SoCalGas RD&D labor and FTE costs (reference SoCalGas Billing IO 7043704) from 2100-3776 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to 2200-2059.001 in work paper group 2RD001 CS Technologies RD&D to align costs where SoCalGas RD&D activity/function resides.							
2014	Other	1	0	0	0.0	1-Sided Adj	CSCHRAMM20161016204854327
Explanation: Exclusion for reimbursable California Energy Commission (CEC) New Solar Homes Program. The agreement number for this activity between SDG&E and CEC is 400-07-006-01. Reference IO 7028662.							
2014	Other	81	0	0	0.7	CCTR Transf From 2100-3584.000	CTRINH20161116081933713
Explanation: Adjustment Due To Re-Org Of SORT Team. Transfer CSF Support labor and FTE from cost center 2100-3584 in work paper group 1FC004.000 CSF Support to cost center 2100-0643 in work paper group 1IN004.000 Customer Programs, Pricing, and Other Office to align historical costs where activity/function resides.							
2014 Total		-128	607	0	-1.8		

2015	Other	0	-1	0	0.0	CCTR Transf To 2200-2059.001	CSCHRAMM20161016112526630
Explanation: Transfer non-labor costs associated with SoCalGas RD&D Project Manager function from cost center 2100-4018 in work paper group 1IN004 Customer Programs, Pricing and Other Office to SoCalGas cost center 2200-2059.001 in work paper group 2RD001 CS - Technologies RD&D to align costs where function resides. Reference internal order: 7025532							

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 4. Customer Programs, Pricing, and Other Office
 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2015	Other	7	0	0	0.1	CCTR Transf To 2100-3518.000	CSCHRAMM20161016205430347
Explanation: Transfer Customer Contact Center Support - Project Manager II labor, FTE and associated non-labor costs from 2100-3455 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3518 in work paper group 100007 CCC Support to align costs where CCC Project Manager activity/function resides.							
2015	Other	-38	-2	0	-0.6	CCTR Transf To 2100-0634.000	CSCHRAMM20161016205606300
Explanation: Transfer Business Services Project Specialist labor, FTE, and associated non-labor from cost center 2100-3579 in work paper group 1IN004 Customer Programs, Pricing and Other Office to cost center 2100-0634 in work paper group 1IN002 Business Services to align costs where activities/functions resides.							
2015	Other	0	-7	0	0.0	1-Sided Adj	CSCHRAMM20161016210218613
Explanation: Exclusion for Energy Efficiency refundable. Reference IO 7010205							
2015	Other	0	-30	0	0.0	1-Sided Adj	CSCHRAMM20161016210333450
Explanation: Exclusion for Energy Efficiency refundable IO. Reference IO 200315904 / 7062311							
2015	Other	-818	-186	0	0.0	1-Sided Adj	CSCHRAMM20161020164404653
Explanation: One-sided adjustment to remove costs associated with legal settlement.							
2015	Other	-14	0	0	-0.1	CCTR Transf From 2100-3584.000	CTRINH20161116082045313
Explanation: Adjustment Due To Re-Org Of SORT Team. Transfer CSF Support labor and FTE from cost center 2100-3584 in work paper group 1FC004.000 CSF Support to cost center 2100-0643 in work paper group 1IN004.000 Customer Programs, Pricing, and Other Office to align historical costs where activity/function resides.							
2015	Other	0	-15	0	0.0	1-Sided Adj	CSCHRAMM20170222153514123
Explanation: One-Sided (Adjust - remove December 2015 accrual of Energy Efficiency Refundable costs) posted in error to MedicalBaseline O&M IO 404980. December 2015 accrual should have been posted against EE Refundable IO 7082469.							
2015 Total		-863	-241	0	-0.6		
2016	Other	0	-82	0	0.0	CCTR Transf To 2100-3675.000	CSCHRAMM20170222154331140
Explanation: Transfer non-labor costs associated with Clean Transportation marketing/outreach from cost center 2100-0004 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-3675 in work paper group 1IN001 Residential Services to align costs where function/activity resides.							
2016	Other	0	-31	0	0.0	CCTR Transf To 2100-0058.000	CSCHRAMM20170222154511827
Explanation: Transfer non-labor costs associated with marketing from cost center 2100-0004 in work paper group 1IN004 Customer Programs, Pricing, and Other Office to cost center 2100-0058 in work paper group 1IN003 Marketing, Research & Analytics to align costs where function/activity resides.							

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 4. Customer Programs, Pricing, and Other Office
 Workpaper: 1IN004.000 - Customer Programs Pricing and Other Office

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2016	Other	-78	-314	0	-0.5	1-Sided Adj	CCHRAMM20170222155032627
Explanation: One-Sided adjustment to remove costs associated with Marketplace Reference IO 415660.							
2016	Other	-50	0	0	0.0	1-Sided Adj	CCHRAMM20170222155935200
Explanation: One-Sided adjustment to remove costs associated with severance.							
2016	Other	0	15	0	0.0	1-Sided Adj	CCHRAMM20170222160209980
Explanation: One-Sided adjustment to remove Jan 2016 accrual reversal /credit of Energy Efficiency Refundable costs, posted in error to O&M Medical Baseline IO 404980. Jan 2016 accrual reversal should have been posted to EE Refundable IO 7082469.							
2016	Other	0	30	0	0.0	1-Sided Adj	CCHRAMM20170222160429570
Explanation: One-Sided adjustment to remove EE Refundable IO credit. Reference IO 200315904							
2016 Total		-128	-382	0	-0.5		

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Information
 Category-Sub: 4. Customer Programs, Pricing, and Other Office
 Workpaper: 11N004.000 - Customer Programs Pricing and Other Office

RAMP Item # 1

Ref ID: CSCHRAMM20170308171553607

RAMP Chapter: SDG&E-3

Program Name: Natural Gas Appliance Test (NGAT)

Program Description: NGAT or CO testing is a safety-related program for Customer Assistance's Energy Savings Assistance (ESA) Program participants. SDG&E conducts Carbon Monoxide (CO) testing on homes weatherized through the ESA Program in accordance with Statewide ESA Program Installation Standards and the Statewide ESA Program Policy and Procedures Manual. CPUC directives require SDG&E to charge the costs for the NGAT program to base rates rather than to the public purpose funds.

Risk/Mitigation:

Risk: Employee, Contractor, and Public Safety
 Mitigation: Customer initiated orders relative to public safety.

Forecast CPUC Cost Estimates (\$000)

	<u>2017</u>	<u>2018</u>	<u>2019</u>
Low	296	296	296
High	355	355	355

Funding Source: CPUC-GRC

Forecast Method: Zero-Based

Work Type: Mandated

Work Type Citation: D.08-11-031 OP65; D.05-04-052 Finding Fact 10; D.00-07-020 Finding of Fact 44

Historical Embedded Cost Estimates (\$000)

Embedded Costs: 147

Explanation: Contractor costs for Natural Gas Appliance Tests for Customer Assistance's ESA Program participants. SDG&E contractors conduct CO testing on homes weatherized through the Energy Savings Assistance (ESA) Program in accordance with Statewide Energy Savings Assistance Program Installation Standards and the Statewide Energy Savings Assistance Program Policy and Procedures Manual. CPUC directives order SDG&E to charge the costs for the NGAT program to base rates rather than to the public purpose funds.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson

Summary of Shared Services Workpapers:

Description	In 2016 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
A. Customer Service Technologies	343	343	343	343
Total	343	343	343	343

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Cost Center: VARIOUS

Summary for Category: A. Customer Service Technologies

	In 2016\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2016	2017	2018	2019
Labor	94	94	94	94
Non-Labor	249	249	249	249
NSE	0	0	0	0
Total	343	343	343	343
FTE	1.0	1.0	1.0	1.0

Cost Centers belonging to this Category:

2100-3434.000 Business Strategy and Development

Labor	0	0	0	0
Non-Labor	239	239	239	239
NSE	0	0	0	0
Total	239	239	239	239
FTE	0.0	0.0	0.0	0.0

2100-3709.000 Low Emission Vehicle Program

Labor	94	94	94	94
Non-Labor	10	10	10	10
NSE	0	0	0	0
Total	104	104	104	104
FTE	1.0	1.0	1.0	1.0

Note: Totals may include rounding differences.

Beginning of Workpaper
2100-3434.000 - Business Strategy and Development

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 1. Business Strategy and Development
 Cost Center: 2100-3434.000 - Business Strategy and Development

Activity Description:

Business Strategy and Development cost center is comprised of various external information services on a company-wide basis. These subscription services are utilized to conduct research on market and industry trends, business model and technology innovations in power and utility sector, peer benchmarking, Mergers and Acquisitions (M&A), analysts reports, forecast on energy supply, demand, and pricing, among others. Data gathered from the external information services will be utilized to support the company's business strategies and initiatives.

Forecast Explanations:

Labor - Base YR Rec

See Below. There are no labor costs associated with this cost center.

Non-Labor - Base YR Rec

A base year forecast method was used because 2016 represents the current activity level and is not expected to change. Therefore, the base year provides a reasonable starting point for future expenditures.

NSE - Base YR Rec

N/A

Summary of Results:

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		0	0	0	0	0	0	0	0	
Non-Labor		331	233	253	229	239	240	240	240	
NSE		0	0	0	0	0	0	0	0	
Total		331	233	253	229	239	240	240	240	
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
2019 GRC - APP
Shared Services Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 1. Business Strategy and Development
 Cost Center: 2100-3434.000 - Business Strategy and Development

Cost Center Allocations (Incurred Costs):

	2016 Adjusted-Recorded					2017 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	240	0	240	0.0	0	240	0	240	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	0	0	0	0	0.0	0	0	0	0	0.0
Total Incurred	0	240	0	240	0.0	0	240	0	240	0.0
% Allocation										
Retained	100.00%	100.00%				100.00%	100.00%			
SEU	0.00%	0.00%				0.00%	0.00%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2018 Adjusted-Forecast					2019 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	240	0	240	0.0	0	240	0	240	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	0	0	0	0	0.0	0	0	0	0	0.0
Total Incurred	0	240	0	240	0.0	0	240	0	240	0.0
% Allocation										
Retained	100.00%	100.00%				100.00%	100.00%			
SEU	0.00%	0.00%				0.00%	0.00%			
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
2019 GRC - APP
Shared Services Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson
Category: A. Customer Service Technologies
Category-Sub: 1. Business Strategy and Development
Cost Center: 2100-3434.000 - Business Strategy and Development

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2016

Business Strategy and Development cost center is comprised of various external information services on a company-wide basis. These subscription services are utilized to conduct research on market and industry trends, business model and technology innovations in power and utility sector, peer benchmarking, M&A, analysts reports, forecast on energy supply, demand, and pricing, among others. Data gathered from the external information services is utilized to support the company's business strategies and initiatives.
Non-Labor cost is 100% retained within SDG&E because these expenses are allocated on a direct use basis and are 100% incurred to support SDG&E.

Cost Center Allocation Percentage for 2017

Business Strategy and Development cost center is comprised of various external information services on a company-wide basis. These subscription services are utilized to conduct research on market and industry trends, business model and technology innovations in power and utility sector, peer benchmarking, M&A, analysts reports, forecast on energy supply, demand, and pricing, among others. Data gathered from the external information services is utilized to support the company's business strategies and initiatives.
Non-Labor cost is 100% retained within SDG&E because these expenses are allocated on a direct use basis and are 100% incurred to support SDG&E.

Cost Center Allocation Percentage for 2018

Business Strategy and Development cost center is comprised of various external information services on a company-wide basis. These subscription services are utilized to conduct research on market and industry trends, business model and technology innovations in power and utility sector, peer benchmarking, M&A, analysts reports, forecast on energy supply, demand, and pricing, among others. Data gathered from the external information services is utilized to support the company's business strategies and initiatives.
Non-Labor cost is 100% retained within SDG&E because these expenses are allocated on a direct use basis and are 100% incurred to support SDG&E.

Cost Center Allocation Percentage for 2019

Business Strategy and Development cost center is comprised of various external information services on a company-wide basis. These subscription services are utilized to conduct research on market and industry trends, business model and technology innovations in power and utility sector, peer benchmarking, M&A, analysts reports, forecast on energy supply, demand, and pricing, among others. Data gathered from the external information services is utilized to support the company's business strategies and initiatives.
Non-Labor cost is 100% retained within SDG&E because these expenses are allocated on a direct use basis and are 100% incurred to support SDG&E.

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 1. Business Strategy and Development
 Cost Center: 2100-3434.000 - Business Strategy and Development

Summary of Adjustments to Forecast:

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	Base YR Rec	0	0	0	0	0	0	0	0	0
Non-Labor	Base YR Rec	239	239	239	0	0	0	239	239	239
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		239	239	239	0	0	0	239	239	239
FTE	Base YR Rec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 1. Business Strategy and Development
 Cost Center: 2100-3434.000 - Business Strategy and Development

Determination of Adjusted-Recorded (Incurred Costs):

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
Recorded (Nominal \$)*					
Labor	237	224	220	204	203
Non-Labor	382	260	297	283	284
NSE	0	0	0	0	0
Total	620	484	517	487	487
FTE	1.9	1.5	1.3	1.0	1.0
Adjustments (Nominal \$) **					
Labor	-237	-224	-220	-204	-203
Non-Labor	-73	-39	-52	-58	-45
NSE	0	0	0	0	0
Total	-311	-262	-272	-262	-248
FTE	-1.9	-1.5	-1.3	-1.0	-1.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	0	0	0
Non-Labor	309	221	245	226	239
NSE	0	0	0	0	0
Total	309	221	245	226	239
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 2016\$					
Labor	0	0	0	0	0
Non-Labor	22	11	8	4	0
NSE	0	0	0	0	0
Total	22	11	8	4	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2016\$)					
Labor	0	0	0	0	0
Non-Labor	331	233	253	229	239
NSE	0	0	0	0	0
Total	331	233	253	229	239
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
2019 GRC - APP
Shared Services Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 1. Business Strategy and Development
 Cost Center: 2100-3434.000 - Business Strategy and Development

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	-237	-224	-220	-204	-203
Non-Labor	-73	-39	-52	-58	-45
NSE	0	0	0	0	0
Total	-311	-262	-272	-262	-248
FTE	-1.9	-1.5	-1.3	-1.0	-1.0

Detail of Adjustments to Recorded:

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
2012	Other	-237	-22	0	-1.9	CCTR Transf To 2200-2229.000	CSCHRAMM20170223152001703
Explanation: Transfer labor/FTE and non-labor costs associated with the Director and Admin. Asst. from SDG&E Utility Shared Service (USS) cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2012	Other	0	0	0	0.0	CCTR Transf To 2200-2229.000	CSCHRAMM20170223152150693
Explanation: Transfer non-labor costs associated with the Director and Admin. Asst. from SDG&E Utility Shared Service (USS) cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2012	Other	0	-23	0	0.0	CCTR Transf To 2200-2059.001	CSCHRAMM20161016122352807
Explanation: Transfer non-labor costs associated with SoCalGas RD&D Projects from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas cost center 2200-2059 in work group 2RD001.001 SCG CS - Technologies RD&D to align costs where function resides. Reference Internal Order: 7025532.							
2012	Other	0	-28	0	0.0	CCTR Transf To 2200-2229.000	CSCHRAMM20161017131603300
Explanation: Transfer SoCalGas Growth Initiative non-labor costs associated with subscription of Wood Mackenzie from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align cost where activity/function resides.							
2012	Other	0	0	0	0.0	CCTR Transf To 2200-2229.000	CSCHRAMM20170222165757507
Explanation: Transfer labor and FTE associated with the Director from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2012 Total		-237	-73	0	-1.9		

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 1. Business Strategy and Development
 Cost Center: 2100-3434.000 - Business Strategy and Development

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2013	Other	0	-14	0	0.0	CCTR Transf To 2200-2059.001	CSCHRAMM20161016122430343
Explanation: Transfer non-labor costs associated with SoCalGas RD&D Projects from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas cost center 2200-2059 in work group 2RD001.001 CS - Technologies RD&D to align costs where function resides. Reference Internal Order: 7025532.							
2013	Other	-224	-24	0	-1.5	CCTR Transf To 2200-2229.000	CSCHRAMM20170223152444417
Explanation: Transfer labor/FTE and non-labor costs associated with the Director and Admin Asst from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2013	Other	0	-1	0	0.0	CCTR Transf To 2200-2229.000	CSCHRAMM20170223152657480
Explanation: Transfer non-labor costs associated with the Director and Admin Asst from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2013 Total		-224	-39	0	-1.5		
2014	Other	-220	-31	0	-1.3	CCTR Transf To 2200-2229.000	CSCHRAMM20170223152833853
Explanation: Transfer labor/FTE and non-labor costs associated with the Director and Admin Asst from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2014	Other	0	0	0	0.0	CCTR Transf To 2200-2229.000	CSCHRAMM20170223152912573
Explanation: Transfer non-labor costs associated with the Director and Admin Asst from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2014	Other	0	-21	0	0.0	CCTR Transf To 2200-2059.001	CSCHRAMM20161016123124097
Explanation: Transfer labor/FTE and non-labor costs associated with SoCalGas RD&D Projects from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas cost center 2200-2059 in work group 2RD001.001 CS - Technologies RD&D to align costs where function resides. Reference Internal Order: 7025532.							
2014 Total		-220	-52	0	-1.3		
2015	Other	0	-29	0	0.0	CCTR Transf To 2200-2059.001	CSCHRAMM20161016123818180
Explanation: Transfer non-labor costs associated with SCG RD&D Projects from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas cost center 2200-2059 in work group 2RD001.001 CS - Technologies RD&D to align costs where function resides. Reference Internal Order: 7025532.							

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 1. Business Strategy and Development
 Cost Center: 2100-3434.000 - Business Strategy and Development

<u>Year</u>	<u>Adj Group</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>RefID</u>
2015	Other	-6	0	0	0.0	SSD_Type Transf FROM IO_Ret	CSCHRAMM20161118120105620
Explanation: Transfer SSD type - Ref IO 7013000 should have been Subject to allocation" versus IO Directly Retained.							
2015	Other	6	0	0	0.0	SSD_Type Transf TO CC_Subj	CSCHRAMM20161118120105620
Explanation: Transfer SSD type - Ref IO 7013000 should have been Subject to allocation" versus IO Directly Retained.							
2015	Other	0	-1	0	0.0	CCTR Transf To 2200-2229.000	CSCHRAMM20170223153656203
Explanation: Transfer labor costs associated with the Director from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2015	Other	-204	-28	0	-1.0	CCTR Transf To 2200-2229.000	CSCHRAMM20170223153826280
Explanation: Transfer labor/FTE and non-labor costs associated with the Director from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2015 Total		-204	-58	0	-1.0		
2016	Other	0	0	0	0.0	CCTR Transf To 2200-2229.000	CSCHRAMM20170223154909763
Explanation: Transfer non-labor costs associated with the Director from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2016	Other	-162	-34	0	-0.8	CCTR Transf To 2200-2229.000	CSCHRAMM20170223154949257
Explanation: Transfer labor/FTE and non-labor costs associated with the Director from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides.							
2016	Other	0	-5	0	0.0	CCTR Transf To 2200-2059.001	CSCHRAMM20170223155129117
Explanation: Transfer non-labor costs associated with SoCalGas RD&D Projects from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas cost center 2200-2059 in work group 2RD001.001 CS - Technologies RD&D to align costs where function resides. Reference Internal Order: 7025532.							
2016	Other	-41	-5	0	-0.2	CCTR Transf To 2200-2229.000	CSCHRAMM20170224080759873
Explanation: Transfer labor/FTE and non-labor costs associated with Aliso Canyon ref. IO 7082025 from SDG&E USS cost center 2100-3434 Business Strategy and Development to SoCalGas USS cost center 2200-2229 Business Analysis and Growth Initiative to align costs where function resides. SoCalGas USS cost center 2200-2229 will enter an adjustment to remove costs from 2016 as they are related to Aliso Canyon.							
2016 Total		-203	-45	0	-1.0		

Note: Totals may include rounding differences.

Beginning of Workpaper
2100-3709.000 - Low Emission Vehicle Program

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Shared Services Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 2. Low Emissions Vehicle Program
 Cost Center: 2100-3709.000 - Low Emission Vehicle Program

Activity Description:

The Natural Gas Vehicle (NGV) Program shared service cost center supports the SDG&E NGV Program, providing NGV utility account management, customer information, education, and training services to the general public, operators of NGVs, operators of NGV refueling stations, government agencies, and others throughout the service territories of both SDG&E and SoCalGas.

Forecast Explanations:

Labor - Base YR Rec

A base year forecast method was used because 2016 represents the current activity level and is not expected to change. Furthermore, this workgroup has a small number of FTEs whose work is not cyclical in nature and should remain constant for 2017 through TY 2019. Therefore, the base year provides a reasonable starting point for future expenditures.

Non-Labor - Base YR Rec

See above.

NSE - Base YR Rec

N/A.

Summary of Results:

		In 2016\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2012	2013	2014	2015	2016	2017	2018	2019	
Labor		85	88	89	90	94	94	94	94	
Non-Labor		10	12	12	12	10	10	10	10	
NSE		0	0	0	0	0	0	0	0	
Total		95	100	100	102	104	104	104	104	
FTE		1.0	1.1	1.1	1.1	1.1	1.0	1.0	1.0	

Note: Totals may include rounding differences.

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Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 2. Low Emissions Vehicle Program
 Cost Center: 2100-3709.000 - Low Emission Vehicle Program

Cost Center Allocations (Incurred Costs):

	2016 Adjusted-Recorded					2017 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	1	0	1	0.0	0	1	0	1	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	94	9	0	103	1.0	94	9	0	103	1.0
Total Incurred	94	10	0	104	1.0	94	10	0	104	1.0
% Allocation										
Retained	9.80%	9.80%				9.80%	9.80%			
SEU	90.20%	90.20%				90.20%	90.20%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2018 Adjusted-Forecast					2019 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	0	1	0	1	0.0	0	1	0	1	0.0
Directly Allocated	0	0	0	0	0.0	0	0	0	0	0.0
Subj. To % Alloc.	94	9	0	103	1.0	94	9	0	103	1.0
Total Incurred	94	10	0	104	1.0	94	10	0	104	1.0
% Allocation										
Retained	9.80%	9.80%				9.80%	9.80%			
SEU	90.20%	90.20%				90.20%	90.20%			
CORP	0.00%	0.00%				0.00%	0.00%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Note: Totals may include rounding differences.

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Shared Services Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson
Category: A. Customer Service Technologies
Category-Sub: 2. Low Emissions Vehicle Program
Cost Center: 2100-3709.000 - Low Emission Vehicle Program

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2016

This cost center includes all costs associated with the NGV Program at SoCalGas and SDG&E, which provides customer information, education, and training to operators of NGVs and NGV refueling stations. The shared service allocation is based on NGV meter counts.
313 G-NGV Mtrs SCG 34 G-NGV Mtrs SDG&E.
Meter count provides an approximation of the overall number of customers served at each respective utility and is a proxy for the relative amount of resources required to provide customer information, education and training programs.

Cost Center Allocation Percentage for 2017

This cost center includes all costs associated with the NGV Program at SoCalGas and SDG&E, which provides customer information, education, and training to operators of NGVs and NGV refueling stations. The shared service allocation is based on NGV meter counts.
313 G-NGV Mtrs SCG 34 G-NGV Mtrs SDG&E.
Meter count provides an approximation of the overall number of customers served at each respective utility and is a proxy for the relative amount of resources required to provide customer information, education and training programs.

Cost Center Allocation Percentage for 2018

This cost center includes all costs associated with the NGV Program at SoCalGas and SDG&E, which provides customer information, education, and training to operators of NGVs and NGV refueling stations. The shared service allocation is based on NGV meter counts.
313 G-NGV Mtrs SCG 34 G-NGV Mtrs SDG&E.
Meter count provides an approximation of the overall number of customers served at each respective utility and is a proxy for the relative amount of resources required to provide customer information, education and training programs.

Cost Center Allocation Percentage for 2019

This cost center includes all costs associated with the NGV Program at SoCalGas and SDG&E, which provides customer information, education, and training to operators of NGVs and NGV refueling stations. The shared service allocation is based on NGV meter counts.
313 G-NGV Mtrs SCG 34 G-NGV Mtrs SDG&E.
Meter count provides an approximation of the overall number of customers served at each respective utility and is a proxy for the relative amount of resources required to provide customer information, education and training programs.

Note: Totals may include rounding differences.

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Shared Services Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 2. Low Emissions Vehicle Program
 Cost Center: 2100-3709.000 - Low Emission Vehicle Program

Summary of Adjustments to Forecast:

In 2016 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2017	2018	2019	2017	2018	2019	2017	2018	2019
Labor	Base YR Rec	94	94	94	0	0	0	94	94	94
Non-Labor	Base YR Rec	10	10	10	0	0	0	10	10	10
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		104	104	104	0	0	0	104	104	104
FTE	Base YR Rec	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	1.0

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

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 2. Low Emissions Vehicle Program
 Cost Center: 2100-3709.000 - Low Emission Vehicle Program

Determination of Adjusted-Recorded (Incurred Costs):

	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)
Recorded (Nominal \$)*					
Labor	69	73	74	77	81
Non-Labor	10	11	12	12	10
NSE	0	0	0	0	0
Total	79	84	86	89	91
FTE	0.9	0.9	0.9	0.9	0.9
Adjustments (Nominal \$) **					
Labor	0	0	-1	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	-1	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	69	73	74	77	81
Non-Labor	10	11	12	12	10
NSE	0	0	0	0	0
Total	79	84	85	89	91
FTE	0.9	0.9	0.9	0.9	0.9
Vacation & Sick (Nominal \$)					
Labor	10	11	12	12	13
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	10	11	12	12	13
FTE	0.1	0.2	0.2	0.2	0.2
Escalation to 2016\$					
Labor	6	4	3	1	0
Non-Labor	1	1	0	0	0
NSE	0	0	0	0	0
Total	6	5	3	2	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2016\$)					
Labor	85	88	89	90	94
Non-Labor	10	12	12	12	10
NSE	0	0	0	0	0
Total	95	100	100	102	104
FTE	1.0	1.1	1.1	1.1	1.1

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

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

Area: CS - INFORMATION & TECHNOLOGIES
 Witness: Lisa C. Davidson
 Category: A. Customer Service Technologies
 Category-Sub: 2. Low Emissions Vehicle Program
 Cost Center: 2100-3709.000 - Low Emission Vehicle Program

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2012	2013	2014	2015	2016
Labor	0	0	-0.573	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	-0.573	0	0
FTE	0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

Year	Adj Group	Labor	NLbr	NSE	FTE	Adj Type	RefID
2012 Total		0	0	0	0.0		
2013 Total		0	0	0	0.0		
2014	Other	-1	0	0	0.0	1-Sided Adj	CSCRAMM20161017131221953
2014 Total		-1	0	0	0.0		
2015 Total		0	0	0	0.0		
2016 Total		0	0	0	0.0		

Explanation: Exclusion of Compression Service Tariff (CST) costs related to the evaluation of CST facility installation site. Pursuant to CPUC decision 12-12-037 Compression Service Tariff activities must be excluded from base rates.

Note: Totals may include rounding differences.

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Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2100-0004	000	VP CUSTOMER SERVICES SVCS & STAFF
2100-0040	000	RES. SERVICES PLANNING & ANALYSIS
2100-0044	000	CUSTOMER CHOICE
2100-0058	000	SDGE CUSTOMER COMMUNICATIONS - RESIDENTL
2100-0064	000	DIR CUST PROGRAMS & PROJECTS
2100-0065	000	RES REBATE PROGRAMS MANAGER
2100-0622	000	COMMERCIAL & INDUSTRIAL MARKETS DIR SDGE
2100-0626	000	FEDERAL ACCOUNTS DIRECTOR
2100-0627	000	FEDERAL PROJECTS
2100-0629	000	POLICY & SUPPORT
2100-0630	000	CUSTOMER ASST MGR - DAP
2100-0634	000	C&I MARKETS MANAGER
2100-0643	000	COMMERCIAL NEW CONSTRUCTION MANAGER
2100-0650	000	RESIDENTIAL & DR PROGRAM MANAGEMENT
2100-0651	000	ENERGY EFFICIENCY PROGRAM MANAGER
2100-0653	000	ENGINEERING SUPPORT SERVICES
2100-0655	000	FEDERAL ACCOUNTS FINANCE & ACCOUNTING
2100-3166	000	CUSTOMER COMMUNICATIONS SCG
2100-3167	000	CUSTOMER COMMUNICATIONS - E-SERVICES
2100-3168	000	CUSTOMER INSIGHTS & ANALYTICS
2100-3307	000	CREATIVE SERVICES & BRANDING SDGE
2100-3435	000	FEDERAL BUSINESS DEVELOPMENT
2100-3437	000	ELECTRIC SAFETY TRAINING
2100-3440	000	DEMAND RESPONSE PROGRAM MANAGER
2100-3442	000	C&I MAJOR ACCOUNTS
2100-3444	000	C&I PROJECT COORDINATION
2100-3446	000	MY ACCOUNT PROGAM MGMT & MARKETING
2100-3448	000	SMALL C&I SEGMENT EE/DR MANAGER
2100-3449	000	RES NEW CONSTRUCTION MANAGER
2100-3450	000	CODES & STANDARDS MANAGER
2100-3451	000	ENERGY EFFICIENCY PARTNERSHIPS & OBF
2100-3452	000	CUSTOMER ASST MGR - CARE
2100-3453	000	CUSTOMER ASST MGR - STRATEGY & OUTREACH
2100-3454	000	CUSTOMER ASSISTANT OUTREACH MANAGER
2100-3455	000	CUSTOMER ASST MGR - PROGRAM SUPPORT
2100-3464	000	ENVIRONMENTAL AFFAIRS MANAGER
2100-3466	000	DIRECTOR OF CUSTOMER COMMUNICATIONS
2100-3530	000	UEG/WHLSLE/COGEN/IPP MANAGER
2100-3545	000	C&I REPRESENTATIVES
2100-3570	000	MARKET PLANNING & ANALYSIS
2100-3579	000	STRATEGY & BUSN IMPROVEMENTS
2100-3580	000	RATE SUPPORT SUPERVISOR
2100-3593	000	MARKETING RESIDENTIAL
2100-3601	000	ENERGY EFFICIENCY NEW CONSTRUCTION
2100-3619	000	TECHNICAL SUPPORT

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Non-Shared Service Workpapers

Area: CS - INFORMATION & TECHNOLOGIES
Witness: Lisa C. Davidson

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2100-3675	000	ELECTRIC TRANSPORTATION
2100-3701	000	VP CUSTOMER SOLUTIONS
2100-3703	000	DIRECTOR RESIDENTIAL SERVICES
2100-3718	000	ELECTRIC LOAD ANALYSIS
2100-3725	000	ELECTRIC DEMAND FORECASTING
2100-3727	000	GAS & ELECTRIC ANALYSIS - SOUTH
2100-3751	000	CLEAN TRANSPORTATION SR. DIRECTOR
2100-3765	000	PROGRAM OPERATIONS
2100-3766	000	CUSTOMER PROGRAMS SUPPORT
2100-3770	000	SDGE CUSTOMER COMMUNICATIONS - BUSINESS
2100-3776	000	ENERGY EFFICIENCY ADMINISTRATIVE COST
2100-3777	000	ENERGY EFFICIENCY MARKETING COST
2100-3778	000	ENERGY EFFICIENCY DIRECT IMPLEMENT COST
2100-3783	000	CUSTOMER INSIGHTS & E-SERVICES
2100-3784	000	CUSTOMER COMMUNICATIONS - TECHNOLOGIES
2100-3786	000	CUSTOMER EXPERIENCE & ENGAGEMENT C&I
2100-3839	000	RES SVCS CUSTOMER EXPERIENCE & ENGAGEMENT
2100-3841	000	NEW PRODUCTS & SERVICES
2100-3847	000	HAN (HOME AREA NETWORK)
2100-3880	000	OFFICE OF CUSTOMER PRIVACY
2100-3899	000	SM & MED BUSINESS MGR
2100-3984	000	CLEAN TRANSPORTATION
2100-4012	000	ADVERTISING & RESEARCH
2100-4018	000	EMERGING TECHNOLOGIES
2100-4026	000	DYNAMIC PRICING MANAGER
2100-4027	000	RES SVCS OUTREACH & EDUCATION