

Application of Southern California Gas)
Company (U 904 G) for Authority to Update)
Its Gas and Electric Revenue Requirement)
and Base Rates Effective January 1, 2019.)
_____)

Application of San Diego Gas & Electric)
Company (U 902 M) for Authority to Update)
Its Gas and Electric Revenue Requirement)
and Base Rates Effective January 1, 2019.)
_____)

Application No. 17-10-008/A.17-10-007
Exhibit No.: (SCG-37/SDG&E-35-WP-S)

**SUPPLEMENTAL
WORKPAPERS TO
PREPARED DIRECT
TESTIMONY OF RAGAN REEVES
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY AND
SAN DIEGO GAS & ELECTRIC COMPANY**

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

APRIL 6, 2018



A  Sempra Energy utility® A  Sempra Energy utility®

**SoCalGas/SDG&E
2019 GRC - APP
Supplemental Tax Workpapers**

SoCalGas and SDG&E 2019 GRC

Revenue Requirement Impact of Rate Base Reduction - as Originally Calculated in Appendix B of the 2016 GRC Decision

Revised to reflect Tax Cuts and Jobs Act and Updated Cost of Capital Percentages

Summary: This schedule shows the recalculation of SoCalGas' and SDG&E's rate base reductions from Appendix B of D.16-06-054 to reflect the impact of the corporate income tax rate change under the Tax Cuts and Jobs Act ("TCJA"), and to reflect the updated cost of capital percentages from D.17-07-005. Effective beginning in 2018, the TCJA reduced the federal corporate income tax rate from 35% to 21%. In the worksheet tabs that follow, the grey tabs show the original calculation under Appendix B of D.16-06-054, while the orange tabs show the revised calculation to reflect the TCJA and the updated cost of capital percentages.

Description of Changes to Appendix B Workpapers to Reflect TCJA & Updated CoC	SoCalGas		SDG&E	
	Tab name	Cells	Tab name2	Cells3
Added the new Federal tax rate of 21% for 2018 and subsequent years	REVISED SoCalGas NPV Calc TCJA	L9 - M9	REVISED SDG&E NPV Calc TCJA	Q9 - R9
Added the new combined Federal and California tax rate of 27.984% for 2018 and subsequent tax years	REVISED SoCalGas NPV Calc TCJA	AB9 - AC9	REVISED SDG&E NPV Calc TCJA	AH9 - AI9
Updated the "ADIT for year" calculations for 2018 and subsequent years to reflect the new Federal tax rate	REVISED SoCalGas NPV Calc TCJA	K20 - M40	REVISED SDG&E NPV Calc TCJA	O22 - R46
Updated the "Section 481A ADIT" calculations for 2018 and subsequent years to reflect the new Federal tax rate. Consistent with the methodology in the original Appendix B calculations, the Section 481A ADIT balance is amortized and reduced each year until the year the balance reaches zero.	REVISED SoCalGas NPV Calc TCJA	U20 - U40	REVISED SDG&E NPV Calc TCJA	AA22 - AA43
Updated the "Tax with gross-up" calculations for 2018 and subsequent years to reflect the new combined Federal and California tax rate.	REVISED SoCalGas NPV Calc TCJA	AC20 - AC40	REVISED SDG&E NPV Calc TCJA	AI22 - AI46
Updated the formulas in "ForeGone ADIT" and "Section 481a" columns for 2018 and subsequent years to reflect the revised rate of return.	REVISED SoCalGas NPV Calc TCJA	X12, X20 - Y40	REVISED SDG&E NPV Calc TCJA	X12, X20 - Y40
Updated the Cost of Capital (D. 17-07-005) for 2018 and subsequent years.	REVISED SoCalGas NPV Calc TCJA	W43 - AE43	REVISED SDG&E NPV Calc TCJA	AC50 - AK50
Added "Grossed-up Rate of Return" worksheet to calculate the revised percentage based on updated Cost of Capital per D. 17-07-005 and new federal tax rate of 21%.	Grossed-up Rate of Return		Grossed-up Rate of Return	
Added the "NTG Multiplier" worksheets from the "rptSummary" file of the RO model and updated the worksheets to: 1) reflect the new Federal tax rate; and 2) calculate the net-to-gross-multiplier applicable for tax years beginning in 2018 using the new Federal tax rate.	SoCalGas - 2018 NTG Multiplier	G23, I23, G30, I32	SDG&E - 2018 NTG Multiplier	I24, K24, I31, K33
Added the revised NTG Multiplier, Weighted Cost of Capital, and combined Federal and California tax rate applicable for 2018 and subsequent years.	REVISED SoCalGas RB Adj TCJA	D10 - D14, D16	REVISED SDG&E RB Adj TCJA	D10 - D14, D16
Added the revised Cost of Capital (D. 17-07-005) and Gross Up percentages to reflect the revised NTG Multiplier applicable for 2018 and subsequent years.	REVISED SoCalGas RB Adj TCJA	M10 - R14	REVISED SDG&E RB Adj TCJA	M10 - R14
Update the formulas in the "Rev Req in 2016\$" row for 2018 and subsequent years to reflect the revised cost of capital.	REVISED SoCalGas RB Adj TCJA	E34 - Y34	REVISED SDG&E RB Adj TCJA	E34 - AC34
Updated the formulas in the "Return on Ratebase, After Gross Up" row for 2018 and subsequent years to reflect the revised Gross Up percentage.	REVISED SoCalGas RB Adj TCJA	E27 - Y27	REVISED SDG&E RB Adj TCJA	E27 - AC27
Consistent with Energy Division's methodology in the original Appendix B workpapers, calculated the revised Rate Base adjustment for each year shown in Row 22 by: 1) deleting the "Total Rate Base Reduction" amount in cell C9; 2) placing the cursor in cell L7; and 3) using the "Goal Seek" feature in Excel, inputting the calculated NPV amount from the "NPV calc" tab as the "To value" in Goal Seek, inputting "C9" in the "By changing cell" box in Goal Seek, and then running the Goal Seek calculation.	REVISED SoCalGas RB Adj TCJA	C9, L7	REVISED SDG&E RB Adj TCJA	C9, L7

**SAN DIEGO GAS & ELECTRIC
2016 Overhead Rates Applied to Shared Service Billings
Test Year 2019 General Rate Case**

Line #	Description	Adjusted Recorded Pool Funding		Gross Up for Loadings (2016\$) [Note (c)]	Total Pool Funding After Gross up (2016\$) (D) = (A+B+C)	Total Loading Base (2016\$) [Note (d)] (E)	Year 2016 GRC OH Rates (F) = (D)/(E)
		2016 Actual Labor (2016\$) [Note (b)] (A)	2016 Actual Non-Labor (2016\$) [Note (b)] (B)				
1	STANDARD LABOR OVERHEADS:						
2	Payroll Taxes [Note (a)]						6.68%
3							
4	Pension & Benefits	315,126	82,234,397	21,050	82,570,574	477,630,165	17.29%
5							
6	Workers' Comp	228,197	3,587,597	15,244	3,831,037	477,630,165	0.80%
7							
8	PLPD	521,256	23,204,319	34,820	23,760,395	477,630,165	4.97%
9							
10	Variable Pay [Note (e)]	50,574,941	-	3,378,406	53,953,347	315,072,696	17.12%
11							
12	Total Labor Overheads:						46.86%
13							
14	SUPPLEMENTAL LABOR LOADER (to be applied to direct labor):						7.34%
15							
16	STANDARD NON-LABOR OVERHEADS:						
17	Purchasing	3,722,175	1,187,449	1,744,523	6,654,148	1,511,478,568	0.44%
18							
19	INDIRECT SUPPORT OVERHEAD:						
20	Affiliate Billing A&G	4,044,927	11,227,489	1,895,792	17,168,208	61,286,280	28.01%
21							

Note (a): Payroll tax rate supplied by the Tax Department. See worksheet tab "PT".

Note (b): See worksheet tab, "Adjusted Recorded" for specific references of the 2016 Actual Labor and Non-Labor numbers.

Note (c): Pension & Benefits, Workers Compensation, PLPD and ICP were grossed up for Payroll Taxes, Line 2.
Supplemental Labor Loader, Purchasing and Affiliate Billing A&G were grossed up for Total Labor Overheads, Line 12.

Note (d): See worksheet tab, "Overhead Loading Base" for specific loading base details.

Note (e): Variable Pay is commonly referred to as the Incentive Compensation Plan ("ICP").

**SAN DIEGO GAS & ELECTRIC
2017 Overhead Rates Applied to Shared Service Billings
Test Year 2019 General Rate Case**

Line #	Description	Adjusted Recorded Pool Funding		Gross Up for Loadings (2016\$) [Note (c)]	Total Pool Funding After Gross up (2016\$) (D) = (A+B+C)	Total Loading Base (2016\$) [Note (d)] (E)	Year 2017 GRC OH Rates (F) = (D)/(E)
		2016 Actual Labor (2016\$) [Note (b)] (A)	2016 Actual Non-Labor (2016\$) [Note (b)] (B)				
1	STANDARD LABOR OVERHEADS:						
2	Payroll Taxes [Note (a)]						6.77%
3							
4	Pension & Benefits	315,126	82,234,397	21,334	82,570,857	477,630,165	17.29%
5							
6	Workers' Comp	228,197	3,587,597	15,449	3,831,243	477,630,165	0.80%
7							
8	PLPD	521,256	23,204,319	35,289	23,760,864	477,630,165	4.97%
9							
10	Variable Pay [Note (e)]	50,574,941	-	3,423,924	53,998,865	315,072,696	17.14%
11							
12	Total Labor Overheads:						46.97%
13							
14	SUPPLEMENTAL LABOR LOADER (to be applied to direct labor):						7.35%
15							
16	STANDARD NON-LABOR OVERHEADS:						
17	Purchasing	3,722,175	1,187,449	1,748,419	6,658,043	1,511,478,568	0.44%
18							
19	INDIRECT SUPPORT OVERHEAD:						
20	Affiliate Billing A&G	4,044,927	11,227,489	1,900,025	17,172,441	61,286,280	28.02%
21							

Note (a): Payroll tax rate supplied by the Tax Department. See worksheet tab "PT".

Note (b): See worksheet tab, "Adjusted Recorded" for specific references of the 2016 Actual Labor and Non-Labor numbers.

Note (c): Pension & Benefits, Workers Compensation, PLPD and ICP were grossed up for Payroll Taxes, Line 2.
Supplemental Labor Loader, Purchasing and Affiliate Billing A&G were grossed up for Total Labor Overheads, Line 12.

Note (d): See worksheet tab, "Overhead Loading Base" for specific loading base details.

Note (e): Variable Pay is commonly referred to as the Incentive Compensation Plan ("ICP").

**SAN DIEGO GAS & ELECTRIC
2018 Overhead Rates Applied to Shared Service Billings
Test Year 2019 General Rate Case**

Line #	Description	Adjusted Recorded Pool Funding		Gross Up for Loadings (2016\$) [Note (c)]	Total Pool Funding After Gross up (2016\$) (D) = (A+B+C)	Total Loading Base (2016\$) [Note (d)] (E)	Year 2018 GRC OH Rates (F) = (D)/(E)
		2016 Actual Labor (2016\$) [Note (b)] (A)	2016 Actual Non-Labor (2016\$) [Note (b)] (B)				
1	STANDARD LABOR OVERHEADS:						
2	Payroll Taxes [Note (a)]						6.65%
3							
4	Pension & Benefits	315,126	82,234,397	20,956	82,570,479	477,630,165	17.29%
5							
6	Workers' Comp	228,197	3,587,597	15,175	3,830,969	477,630,165	0.80%
7							
8	PLPD	521,256	23,204,319	34,664	23,760,238	477,630,165	4.97%
9							
10	Variable Pay [Note (e)]	50,574,941	-	3,363,234	53,938,175	315,072,696	17.12%
11							
12	Total Labor Overheads:						46.83%
13							
14	SUPPLEMENTAL LABOR LOADER (to be applied to direct labor):						7.34%
15							
16	STANDARD NON-LABOR OVERHEADS:						
17	Purchasing	3,722,175	1,187,449	1,743,225	6,652,849	1,511,478,568	0.44%
18							
19	INDIRECT SUPPORT OVERHEAD:						
20	Affiliate Billing A&G	4,044,927	11,227,489	1,894,381	17,166,797	61,286,280	28.01%
21							

Note (a): Payroll tax rate supplied by the Tax Department. See worksheet tab "PT".

Note (b): See worksheet tab, "Adjusted Recorded" for specific references of the 2016 Actual Labor and Non-Labor numbers.

Note (c): Pension & Benefits, Workers Compensation, PLPD and ICP were grossed up for Payroll Taxes, Line 2.
Supplemental Labor Loader, Purchasing and Affiliate Billing A&G were grossed up for Total Labor Overheads, Line 12.

Note (d): See worksheet tab, "Overhead Loading Base" for specific loading base details.

Note (e): Variable Pay is commonly referred to as the Incentive Compensation Plan ("ICP").

SAN DIEGO GAS & ELECTRIC
2019 Overhead Rates Applied to Shared Service Billings
Test Year 2019 General Rate Case

Line #	Description	Adjusted Recorded Pool Funding		Gross Up for Loadings (2016\$)	Total Pool Funding After Gross up (2016\$)	Total Loading Base (2016\$)	Year 2019 GRC OH Rates
		2016 Actual Labor (2016\$)	2016 Actual Non-Labor (2016\$)				
		[Note (b)] (A)	[Note (b)] (B)				
				[Note (c)] (C) = (A) x Rate	(D) = (A+B+C)	[Note (d)] (E)	(F) = (D)/(E)
1	STANDARD LABOR OVERHEADS:						
2	Payroll Taxes [Note (a)]						6.66%
3							
4	Pension & Benefits	315,126	82,234,397	20,987	82,570,511	477,630,165	17.29%
5							
6	Workers' Comp	228,197	3,587,597	15,198	3,830,992	477,630,165	0.80%
7							
8	PLPD	521,256	23,204,319	34,716	23,760,290	477,630,165	4.97%
9							
10	Variable Pay [Note (e)]	50,574,941	-	3,368,291	53,943,232	315,072,696	17.12%
11							
12	Total Labor Overheads:						46.84%
13							
14	SUPPLEMENTAL LABOR LOADER (to be applied to direct labor):						7.34%
15							
16	STANDARD NON-LABOR OVERHEADS:						
17	Purchasing	3,722,175	1,187,449	1,743,658	6,653,282	1,511,478,568	0.44%
18							
19	INDIRECT SUPPORT OVERHEAD:						
20	Affiliate Billing A&G	4,044,927	11,227,489	1,894,851	17,167,267	61,286,280	28.01%
21							

Note (a): Payroll tax rate supplied by the Tax Department. See worksheet tab "PT".

Note (b): See worksheet tab, "Adjusted Recorded" for specific references of the 2016 Actual Labor and Non-Labor numbers.

Note (c): Pension & Benefits, Workers Compensation, PLPD and ICP were grossed up for Payroll Taxes, Line 2.
Supplemental Labor Loader, Purchasing and Affiliate Billing A&G were grossed up for Total Labor Overheads, Line 12.

Note (d): See worksheet tab, "Overhead Loading Base" for specific loading base details.

Note (e): Variable Pay is commonly referred to as the Incentive Compensation Plan ("ICP").

**SAN DIEGO GAS & ELECTRIC
Derivation of 2016 Adjusted Recorded Pool Funding for Labor
Test Year 2019 General Rate Case**

Line #	Category	2016 Adjusted Actual Labor (2016\$)	2016 Adjusted Actual Non-Labor (2016\$)	Worksheet Tab Reference
1	Pension & Benefits	315,126	82,234,397	<i>WP-8</i>
2				
3	Workers' Comp	228,197	3,587,597	<i>WP-9</i>
4				
5	PLPD	521,256	23,204,319	<i>WP-10</i>
6				
7	Variable Pay	50,574,941		<i>WP-11</i>
8				
9	Purchasing	3,722,175	1,187,449	<i>WP-12</i>
10				
11	Affiliate Billing A&G	4,044,927	11,227,489	<i>WP-13</i>

SAN DIEGO GAS & ELECTRIC
Loading Base Derivation for Shared Services Overheads
Test Year 2019 General Rate Case

Line #	Description	Amount (2016\$)
1	TOTAL COMPANY LABOR:	
2	Account (Cost Element) Range 6110000 to 6119999	533,213,177
3	Exclude ICP payout:	(55,583,012)
4	Total GRC Labor Overhead Loading Base:	477,630,165
5		
6	TOTAL COMPANY NON-UNION LABOR:	
7	Account (Cost Element) Range 6110000 to 6119999	533,213,177
8	Exclude ICP payout:	(55,583,012)
9	Exclude Union labor:	(162,557,470)
10	Total GRC ICP Overhead Loading Base:	315,072,696
11		
12	TOTAL COMPANY PURCHASING NON-LABOR:	
13	Account (Cost Element) Range 6210000 to 6232999	1,511,478,568
14	Total GRC Non-Labor Overhead Loading Base:	1,511,478,568
15		
16		
17		
18	TOTAL AFFILIATE BILLING LABOR & NON-LABOR:	
19	Account (Cost Element) Group 'AG_BASE' 6110010 to 6119999	23,045,038
20	Gross up with V&S factor (16.01%)	3,689,225
21	Account (Cost Element) Group 'AG_BASE' 6130000 TO 6400410, exc. Fleet	34,552,016
22	Total Grossed up Loading Base for Affiliate Billing A&G:	61,286,280

Notes:

Line 20 - Vacation and Sick (V&S) Factors for 2016 - 2019 applicable to forecast O&M and capital labor costs and hours are based on a 3-yr avg rate through 2016 recorded V&S data.

**SAN DIEGO GAS & ELECTRIC
Payroll Tax Rates
Test Year 2019 General Rate Case**

Line #	Year	Rate
1	2016	6.68%
2	2017	6.77%
3	2018	6.65%
4	2019	6.66%

Notes:

The Payroll Tax rates were provided by the Tax Department.

SAN DIEGO GAS & ELECTRIC
2016 Pension and Benefits (P&B) Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case

Line #	A	Internal Orders 200314770, 200321921 - Pool Pension & Benefits:	(2016\$)
1		Labor Costs	315,126
2		Non-Labor Costs:	
3		Emp Ben-Health Insurance	43,860,012.32
4		Emp Ben-Dental Insurance	2,440,585.72
5		Emp Ben-Vision Insurance	317,789.03
6		Emp Ben-Life Insurance	674,755.36
7		Emp Ben-Fees & Srv \$	669,022.26
8		Emp Ben-Emp Asst Pgr	333,167.52
9		Emp Ben-Emp Well Pgr	725,359.57
10		Emp Ben-Long Term Disability	(947,335.65)
11		Emp Ben-Educ Assist	439,382.59
12		Emp Ben-Transp Allow	83,663.96
13		Emp Ben-Ymca-Imputable	141,681.61
14		Emp Ben-Emp Relocation	192,609.96
15		Emp Ben-Life Ins Retired	155,913.55
16		Emp Ben-Health Ins Retired	2,200,605.32
17		Emp Ben-Ad&D Insuran	73,894.15
18		Emp Ben-Serp Exp Actives	3,188,828.00
19		Emp Ben-Rsp Company Match	13,205,199.22
20		Emp Benefits-Incentive Match	1,442,887.00
21		Emp Ben-Ret Towrkexm	57,609.04
22		Emp Ben-Retireact	133,052.19
23		Emp Ben-Mental Health	1,404,397.73
24		Emp Ben-Misc	180,934.56
25		P&B Group Non Labor Expenses	2,300,424.89
26		Intercompany Charges	<u>9,413,280.25</u>
27			82,687,720
28		Total:	<u>83,002,847</u>
29			
30	B	G/L Acet 1334042 & 1334043 - Clear A/C-P&B:	
31		Labor Costs	-
32		Non-Labor Costs	-
33		Total:	<u>-</u>
34			
35	C=A+B	2016 P&B Overhead Pool Funding Before Adjustment:	
36		Labor Costs	315,126
37		Non-Labor Costs	82,687,720
38		Total:	<u>83,002,847</u>
39			
40	D	Adjustment to P&B Overhead Pool Funding:	
41		Labor Costs	-
42		Non-Labor Costs, Accruals	(453,323)
43		Total:	<u>(453,323)</u>
44			
45	E=C+D	Adjusted Recorded P&B Overhead Pool Funding:	
46		Labor Costs	315,126
47		Non-Labor Costs	82,234,397
48		Total:	<u>82,549,523</u>

**SAN DIEGO GAS & ELECTRIC
2016 Worker's Compensation Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case**

		<u>(2016\$)</u>	
Line #	A	Internal Orders 200314769 - Pool Worker's Compensation:	
1		Labor Costs	228,197
2		Non-Labor Costs:	
3		Emp Ben-Wkrcompmed	1,953,802.09
4		Emp Ben-Wkrcompoth	555,053.08
5		Emp Ben-Workers' Comp Adjustment	(723,548.79)
6		Emp Ben-Wcompidem	2,779,492.69
7		Emp Ben-Wcompadmin	291,513.77
8		Emp Ben-Workers Comp-Refunds	(976,863.53)
9		A&G-Injuries & Damages	857,968.18
10		Claims Group non labor expenses	26,174.46
11		Intercompany Charges	<u>529,009.76</u>
12			5,292,602
13		Total:	<u>5,520,799</u>
14			
15	B	G/L Acct 1334001 - Clear A/C-WC:	
16		Labor Costs	-
17		Non-Labor Costs	-
18		Total:	<u>-</u>
19			
20	C=A+B	2016 WC Overhead Pool Funding Before Adjustment:	
21		Labor Costs	228,197
22		Non-Labor Costs	5,292,602
23		Total:	<u>5,520,799</u>
24			
25	D	Adjustment to WC Overhead Pool Funding:	
26		Labor Costs	-
27		Non-Labor Costs, Accruals	(1,705,005)
28		Total:	<u>(1,705,005)</u>
29			
30	E=C+D	Adjusted Recorded WC Overhead Pool Funding:	
31		Labor Costs	228,197
32		Non-Labor Costs	3,587,597
33		Total:	<u>3,815,794</u>

**SAN DIEGO GAS & ELECTRIC
2016 PLPD Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case**

			<u>(2016\$)</u>
Line #	A	Internal Orders 200314768 - Pool PLPD:	
1		Labor Costs	521,256
2		Non-Labor Costs:	
3		A&G-Injuries & Damages	21,030,751.36
4		Disability Management Group non labor expenses	28,049.86
5		Intercompany Charges	<u>68,282.57</u>
6			21,127,084
7		Total:	<u>21,648,340</u>
8			
9	B	G/L Acct 1334002 - Clear A/C-PLPD:	
10		Labor Costs	-
11		Non-Labor Costs	-
12		Total:	<u>-</u>
13			
14	C=A+B	2016 PLPD Overhead Pool Funding Before Adjustment:	
15		Labor Costs	521,256
16		Non-Labor Costs	21,127,084
17		Total:	<u>21,648,340</u>
18			
19	D	Adjustment to PLPD Overhead Pool Funding:	
20		Labor Costs	-
21		Non-Labor Costs, Accruals	2,077,235
22		Total:	<u>2,077,235</u>
23			
24	E=C+D	Adjusted Recorded PLPD Overhead Pool Funding:	
25		Labor Costs	521,256
26		Non-Labor Costs	23,204,319
27		Total:	<u><u>23,725,575</u></u>

SAN DIEGO GAS & ELECTRIC
2016 Variable Pay Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case

			(2016\$)
Line #	A	Internal Orders 200314765 - Pool Variable Pay:	
1		Labor Costs	55,557,297
2		Non-Labor Costs:	-
3		Total:	55,557,297
4			
5	B	G/L Acct 1334047 - Clear A/C-Variable Pay:	
6		Labor Costs	-
7		Non-Labor Costs	-
8		Total:	-
9			
10	C=A+B	2016 Variable Pay Overhead Pool Funding Before Adjustment:	
11		Labor Costs	55,557,297
12		Non-Labor Costs	-
13		Total:	55,557,297
14			
15	D	Adjustment to Variable Pay Overhead Pool Funding:	
16		Labor Costs	
17		2017 VARIABLE PAY TRUE-UP ACCRUAL TO PAYMENT	11,752,892.00
18		Non-Recorded Adjustment ¹	(16,735,248.09)
19			(4,982,356)
20		Non-Labor Costs	-
21		Total:	(4,982,356)
22			
23	E=C+D		
24		Adjusted Recorded Variable Pay Overhead Pool Funding:	
25		Labor Costs	50,574,941
26		Non-Labor Costs	-
27		Total:	50,574,941

Footnote:

¹ Non-Recorded Adjustment ensures Variable Pay reflects target of 100%

SAN DIEGO GAS & ELECTRIC
2016 Purchasing Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case

Line #	A	Internal Orders 200314773 - Pool Purchasing:	(2016\$)
1		Labor Costs	3,722,175
2		Non-Labor Costs:	
3		Purchasing Group Non Labor Expenses	<u>1,187,449.16</u>
4			1,187,449
5		Total:	<u>4,909,624</u>
6			
7	B	G/L Acct 1334055 - Clear A/C-Purchasing:	
8		Labor Costs	-
9		Non-Labor Costs	-
10		Total:	<u>-</u>
11			
12	C=A+B	2016 Purchasing Overhead Pool Funding Before Adjustment:	
13		Labor Costs	3,722,175
14		Non-Labor Costs	1,187,449
15		Total:	<u>4,909,624</u>
16			
17	D	Adjustment to Purchasing Overhead Pool Funding:	
18		Labor Costs	-
19		Non-Labor Costs	-
20		Total:	<u>-</u>
21			
22	E=C+D	Adjusted Recorded Purchasing Overhead Pool Funding:	
23		Labor Costs	3,722,175
24		Non-Labor Costs	1,187,449
25		Total:	<u><u>4,909,624</u></u>

SAN DIEGO GAS & ELECTRIC
2016 Affiliate A&G Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case

Line #	A	Internal Orders 200314782 - Pool Affiliate A&G:	(2016\$)
1		Labor Costs	4,044,927
2		Non-Labor Costs:	
3		Affiliate Billing Administrative & General (A&G) Group non labor expenses	5,639,693.60
4		Intercompany charges	<u>5,587,795.71</u>
5			11,227,489
6		Total:	<u>15,272,416</u>
7			
8	B	G/L Acct 1334097 - Clear A/C-Affiliate A&G:	
9		Labor Costs	-
10		Non-Labor Costs	-
11		Total:	<u>-</u>
12			
13	C=A+B	2016 Affiliate A&G Overhead Pool Funding Before Adjustment:	
14		Labor Costs	4,044,927
15		Non-Labor Costs	11,227,489
16		Total:	<u>15,272,416</u>
17			
18	D	Adjustment to Affiliate A&G Overhead Pool Funding:	
19		Labor Costs	-
20		Non-Labor Costs	-
21		Total:	<u>-</u>
22			
23	E=C+D	Adjusted Recorded Purchasing Overhead Pool Funding:	
24		Labor Costs	4,044,927
25		Non-Labor Costs	11,227,489
26		Total:	<u><u>15,272,416</u></u>

**SAN DIEGO GAS & ELECTRIC
Vacation & Sick (V&S) Rates
Test Year 2019 General Rate Case**

Line	Year	1-Yr Rate	3-Yr Avg Rate
1	2013	15.86%	
2	2014	15.97%	
3	2015	15.44%	
4	2016	16.59%	16.01%
5	2017		16.01%
6	2018		16.01%
7	2019		16.01%

Notes:

Use 3-Yr Avg Rate to Gross-Up Affiliate Billing OH labor base.

SAN DIEGO GAS & ELECTRIC
Vacation & Sick (V&S) Detail for GRC
Test Year 2019 General Rate Case

	<u>Recorded Expense</u>	<u>V&S Hours</u>	<u>V&S Base</u>	<u>V&S Base Hours</u>	<u>V&S Percent</u> <u>Before Adj</u>	<u>Vacation</u> <u>Bought/Sold</u>	<u>Expense Less</u>	<u>Adjustments</u>	<u>V&S Percent</u> <u>After Adj</u>
January	9,195,990.18	233,729.9	30,253,513.4	691,113.1		(240,384.15)	9,436,374.33		31.19%
February	3,958,545.05	107,521.2	31,399,507.5	707,160.5		(245,939.99)	4,204,485.04		13.39%
March	4,082,619.77	110,019.3	33,606,959.0	744,529.2		(245,322.40)	4,327,942.17		12.88%
April	4,038,523.22	108,172.1	35,194,588.9	787,146.0		(245,184.05)	4,283,707.27		12.17%
2 May	3,282,427.61	91,407.8	36,343,817.8	824,240.2		(245,120.80)	3,527,548.41		9.71%
0 June	4,815,682.52	125,097.4	29,429,246.1	669,274.5		(243,671.28)	5,059,353.80		17.19%
1 July	6,028,956.20	155,180.5	33,087,167.4	749,569.6		(242,100.79)	6,271,056.99		18.95%
3 August	3,680,959.74	96,605.8	33,706,329.4	769,151.8		(226,195.78)	3,907,155.52		11.59%
September	6,522,702.26	163,442.7	31,042,992.3	675,514.1		(259,915.98)	6,782,618.24		21.85%
October	1,580,546.51	49,174.9	37,726,505.3	839,568.2		(354,244.97)	1,934,791.48		5.13%
November	3,532,402.09	88,743.4	33,167,065.8	735,338.5		(121,150.79)	3,653,552.88		11.02%
December	8,935,263.08	217,242.4	29,356,353.1	633,242.0		(230,505.82)	9,165,768.90		31.22%
	59,654,618.23	1,546,337.3	394,314,045.93	8,825,847.7	15.13%	(2,899,736.80)	62,554,355.03		15.86%

	<u>Recorded Expense</u>	<u>V&S Hours</u>	<u>V&S Base</u>	<u>V&S Base Hours</u>	<u>V&S Percent</u> <u>Before Adj</u>	<u>Vacation</u> <u>Bought/Sold</u>	<u>Expense Less</u>	<u>Adjustments</u>	<u>V&S Percent</u> <u>After Adj</u>
January	9,592,729.43	240,949.3	27,733,089.48	626,201.0		(245,228.46)	9,837,957.89		35.47%
February	3,736,621.96	99,419.7	30,361,345.51	662,826.0		(245,374.98)	3,981,996.94		13.12%
March	4,064,145.51	106,161.7	32,675,867.27	699,534.8		(245,015.84)	4,309,161.35		13.19%
April	4,003,480.34	108,049.9	33,156,069.14	723,788.5		(365,789.82)	4,369,270.16		13.18%
2 May	3,341,872.41	85,634.5	36,296,118.61	767,528.6		(120,779.22)	3,462,651.63		9.54%
0 June	4,808,558.64	123,899.3	31,621,157.48	673,744.3		(242,942.10)	5,051,500.74		15.98%
1 July	5,985,269.88	149,498.7	32,843,345.76	711,747.8		(238,289.88)	6,223,559.76		18.95%
4 August	4,137,006.26	100,254.5	32,351,279.12	693,720.5		(237,475.10)	4,374,481.36		13.52%
September	6,010,955.89	148,850.9	30,933,932.85	658,973.6		(237,034.88)	6,247,990.77		20.20%
October	1,763,274.98	46,371.4	38,277,933.21	807,933.1		(235,472.08)	1,998,747.06		5.22%
November	3,119,563.64	78,703.6	31,932,098.84	668,792.5		(231,715.12)	3,351,278.76		10.50%
December	8,753,694.74	206,732.5	31,251,567.67	636,964.8		(230,045.82)	8,983,740.56		28.75%
	59,317,173.68	1,494,525.81	389,433,804.94	8,331,755.51	15.23%	(2,875,163.30)	62,192,336.98		15.97%

	<u>Recorded Expense</u>	<u>V&S Hours</u>	<u>V&S Base</u>	<u>V&S Base Hours</u>	<u>V&S Percent</u> <u>Before Adj</u>	<u>Vacation</u> <u>Bought/Sold</u>	<u>Expense Less</u>	<u>Adjustments</u>	<u>V&S Percent</u> <u>After Adj</u>
January	9,585,389.21	229,212.1	26,990,652.58	567,545.7		(215,399.21)	9,800,788.42		36.31%
February	3,727,576.69	97,058.8	30,503,710.60	640,716.1		(219,300.01)	3,946,876.70		12.94%
March	4,261,082.01	107,382.9	34,098,760.11	695,687.1		(220,288.30)	4,481,370.31		13.14%
April	3,753,160.57	97,716.6	34,846,627.89	708,784.1		(331,770.11)	4,084,930.68		11.72%
2 May	3,412,422.34	84,432.0	32,791,853.43	680,731.2		(109,303.30)	3,521,725.64		10.74%
0 June	4,945,702.91	121,895.1	33,315,854.45	684,018.1		(219,333.32)	5,165,036.23		15.50%
1 July	6,036,094.73	144,458.4	33,689,935.81	695,375.5		(213,341.06)	6,249,435.79		18.55%
5 August	3,660,155.63	87,165.4	33,578,954.01	680,982.2		(215,444.77)	3,875,600.40		11.54%
September	4,787,239.73	121,041.2	32,980,671.72	676,483.9		(314,167.47)	5,101,407.20		15.47%
October	2,846,819.19	66,202.2	35,497,926.50	742,445.1		(103,791.31)	2,950,610.50		8.31%
November	2,920,480.66	71,383.7	35,385,615.05	712,549.7		(208,184.63)	3,128,665.29		8.84%
December	8,352,969.34	185,560.7	30,621,796.67	594,911.4		(209,677.87)	8,562,647.21		27.96%
	58,289,093.01	1,413,508.96	394,302,358.82	8,080,230.08	14.78%	(2,580,001.36)	60,869,094.37		15.44%

	<u>Recorded Expense</u>	<u>V&S Hours</u>	<u>V&S Base</u>	<u>V&S Base Hours</u>	<u>V&S Percent</u> <u>Before Adj</u>	<u>Vacation</u> <u>Bought/Sold</u>	<u>Expense Less</u>	<u>Adjustments</u>	<u>V&S Percent</u> <u>After Adj</u>
January	10,990,666.10	249,066.7	30,108,541.18	607,408.5		(139,665.32)	11,130,331.42		36.97%
February	3,680,638.13	87,721.8	33,285,732.04	663,802.9		(138,938.39)	3,819,576.52		11.48%
March	5,142,937.48	120,536.9	37,925,247.94	759,733.7		(210,333.53)	5,353,271.01		14.12%
April	3,711,903.69	85,846.1	33,836,321.12	686,512.8		(155,888.87)	3,867,792.56		11.43%
2 May	3,469,856.06	81,747.1	35,920,149.68	725,395.7		(140,154.27)	3,610,010.33		10.05%
0 June	5,394,308.14	122,173.6	34,161,209.86	687,951.8		(136,640.94)	5,530,949.08		16.19%
1 July	7,761,337.04	172,401.8	30,271,470.27	604,574.5		(138,632.81)	7,899,969.85		26.10%
6 August	2,511,331.05	58,825.7	39,847,432.89	802,584.5		(205,577.87)	2,716,908.92		6.82%
September	5,151,993.92	115,744.0	35,035,919.52	697,163.8		(153,007.19)	5,305,001.11		15.14%
October	3,498,004.48	79,149.3	34,923,804.94	694,016.9		(138,875.62)	3,636,880.10		10.41%
November	3,594,943.76	82,626.0	36,082,526.73	722,492.7		(138,014.54)	3,732,958.30		10.35%
December	11,668,563.95	240,366.3	29,852,496.43	587,014.1		31,009.20	11,637,554.75		38.98%
	66,576,483.80	1,496,205.12	411,250,852.60	8,238,651.97	16.19%	(1,664,720.15)	68,241,203.95		16.59%

*2016 based on BW report

3 Years Average 2014-2016

16.01%

SOUTHERN CALIFORNIA GAS COMPANY
2016 Overhead Rates Applied to Shared Service Billings
Test Year 2019 General Rate Case

Line #	Description	Adjusted Recorded Pool Funding		Gross Up for Loadings (2016\$) [Note (c)]	Total Pool Funding After Gross up (2016\$) (D) = (A+B+C)	Total Loading Base (2016\$) [Note (d)] (E)	Year 2016 GRC OH Rates (F) = (D)/(E)
		2016 Actual Labor (2016\$) [Note (b)] (A)	2016 Actual Non-Labor (2016\$) [Note (b)] (B)				
1	STANDARD LABOR OVERHEADS:						
2	Payroll Taxes [Note (a)]						7.51%
3							
4	Pension & Benefits	1,343,102	199,990,925	100,867	201,434,894	750,332,940	26.85%
5							
6	Workers' Comp	860,127	8,618,102	64,596	9,542,825	750,332,940	1.27%
7							
8	PLPD	494,616	28,403,418	37,146	28,935,180	750,332,940	3.86%
9							
10	Variable Pay [Note (e)]	57,386,898	-	4,309,756	61,696,654	341,114,203	18.09%
11							
12	Total Labor Overheads:						57.58%
13							
14	SUPPLEMENTAL LABOR LOADER (to be applied to direct labor):						7.88%
15							
16	STANDARD NON-LABOR OVERHEADS:						
17	Purchasing	3,683,003	2,834,924	2,120,342	8,638,269	1,694,157,961	0.51%
18							
19	INDIRECT SUPPORT OVERHEAD:						
20	Affiliate Billing A&G	1,498,718	5,927,712	862,827	8,289,257	25,028,014	33.12%
21							

Note (a): Payroll tax rate supplied by the Tax Department. See worksheet tab "PT".

Note (b): See worksheet tab, "Adjusted Recorded" for specific references of the 2016 Actual Labor and Non-Labor numbers.

Note (c): Pension & Benefits, Workers Compensation, PLPD and ICP were grossed up for Payroll Taxes, Line 2.

Supplemental Labor Loader, Purchasing and Affiliate Billing A&G were grossed up for Total Labor Overheads, Line 12.

Note (d): See worksheet tab, "Overhead Loading Base" for specific loading base details.

Note (e): Variable Pay is commonly referred to as the Incentive Compensation Plan ("ICP").

SOUTHERN CALIFORNIA GAS COMPANY
2017 Overhead Rates Applied to Shared Service Billings
Test Year 2019 General Rate Case

Line #	Description	Adjusted Recorded Pool Funding		Gross Up for Loadings (2016\$) [Note (c)]	Total Pool Funding After Gross up (2016\$) (D) = (A+B+C)	Total Loading Base (2016\$) [Note (d)] (E)	Year 2017 GRC OH Rates (F) = (D)/(E)
		2016 Actual Labor (2016\$) [Note (b)] (A)	2016 Actual Non-Labor (2016\$) [Note (b)] (B)				
1	STANDARD LABOR OVERHEADS:						
2	Payroll Taxes [Note (a)]						7.58%
3							
4	Pension & Benefits	1,343,102	199,990,925	101,807	201,435,834	750,332,940	26.85%
5							
6	Workers' Comp	860,127	8,618,102	65,198	9,543,427	750,332,940	1.27%
7							
8	PLPD	494,616	28,403,418	37,492	28,935,526	750,332,940	3.86%
9							
10	Variable Pay [Note (e)]	57,386,898	-	4,349,927	61,736,824	341,114,203	18.10%
11							
12	Total Labor Overheads:						57.66%
13							
14	SUPPLEMENTAL LABOR LOADER (to be applied to direct labor):						7.88%
15							
16	STANDARD NON-LABOR OVERHEADS:						
17	Purchasing	3,683,003	2,834,924	2,123,363	8,641,290	1,694,157,961	0.51%
18							
19	INDIRECT SUPPORT OVERHEAD:						
20	Affiliate Billing A&G	1,498,718	5,927,712	864,056	8,290,486	25,028,014	33.12%
21							

Note (a): Payroll tax rate supplied by the Tax Department. See worksheet tab "PT".

Note (b): See worksheet tab, "Adjusted Recorded" for specific references of the 2016 Actual Labor and Non-Labor numbers.

Note (c): Pension & Benefits, Workers Compensation, PLPD and ICP were grossed up for Payroll Taxes, Line 2.

Supplemental Labor Loader, Purchasing and Affiliate Billing A&G were grossed up for Total Labor Overheads, Line 12.

Note (d): See worksheet tab, "Overhead Loading Base" for specific loading base details.

Note (e): Variable Pay is commonly referred to as the Incentive Compensation Plan ("ICP").

SOUTHERN CALIFORNIA GAS COMPANY
2018 Overhead Rates Applied to Shared Service Billings
Test Year 2019 General Rate Case

Line #	Description	Adjusted Recorded Pool Funding		Gross Up for Loadings (2016\$) [Note (c)]	Total Pool Funding After Gross up (2016\$) (D) = (A+B+C)	Total Loading Base (2016\$) [Note (d)] (E)	Year 2018 GRC OH Rates (F) = (D)/(E)
		2016 Actual Labor (2016\$) [Note (b)] (A)	2016 Actual Non-Labor (2016\$) [Note (b)] (B)				
1	STANDARD LABOR OVERHEADS:						
2	Payroll Taxes [Note (a)]						7.43%
3							
4	Pension & Benefits	1,343,102	199,990,925	99,792	201,433,819	750,332,940	26.85%
5							
6	Workers' Comp	860,127	8,618,102	63,907	9,542,137	750,332,940	1.27%
7							
8	PLPD	494,616	28,403,418	36,750	28,934,784	750,332,940	3.86%
9							
10	Variable Pay [Note (e)]	57,386,898	-	4,263,846	61,650,744	341,114,203	18.07%
11							
12	Total Labor Overheads:						57.48%
13							
14	SUPPLEMENTAL LABOR LOADER (to be applied to direct labor):						7.87%
15							
16	STANDARD NON-LABOR OVERHEADS:						
17	Purchasing	3,683,003	2,834,924	2,116,889	8,634,816	1,694,157,961	0.51%
18							
19	INDIRECT SUPPORT OVERHEAD:						
20	Affiliate Billing A&G	1,498,718	5,927,712	861,422	8,287,852	25,028,014	33.11%
21							

Note (a): Payroll tax rate supplied by the Tax Department. See worksheet tab "PT".

Note (b): See worksheet tab, "Adjusted Recorded" for specific references of the 2016 Actual Labor and Non-Labor numbers.

Note (c): Pension & Benefits, Workers Compensation, PLPD and ICP were grossed up for Payroll Taxes, Line 2.

Supplemental Labor Loader, Purchasing and Affiliate Billing A&G were grossed up for Total Labor Overheads, Line 12.

Note (d): See worksheet tab, "Overhead Loading Base" for specific loading base details.

Note (e): Variable Pay is commonly referred to as the Incentive Compensation Plan ("ICP").

SOUTHERN CALIFORNIA GAS COMPANY
2019 Overhead Rates Applied to Shared Service Billings
Test Year 2019 General Rate Case

Line #	Description	Adjusted Recorded Pool Funding		Gross Up for Loadings (2016\$) [Note (c)]	Total Pool Funding After Gross up (2016\$) (D) = (A+B+C)	Total Loading Base (2016\$) [Note (d)] (E)	Year 2019 GRC OH Rates (F) = (D)/(E)
		2016 Actual Labor (2016\$) [Note (b)] (A)	2016 Actual Non-Labor (2016\$) [Note (b)] (B)				
1	STANDARD LABOR OVERHEADS:						
2	Payroll Taxes [Note (a)]						7.44%
3							
4	Pension & Benefits	1,343,102	199,990,925	99,927	201,433,954	750,332,940	26.85%
5							
6	Workers' Comp	860,127	8,618,102	63,993	9,542,223	750,332,940	1.27%
7							
8	PLPD	494,616	28,403,418	36,799	28,934,834	750,332,940	3.86%
9							
10	Variable Pay [Note (e)]	57,386,898	-	4,269,585	61,656,483	341,114,203	18.08%
11							
12	Total Labor Overheads:						57.50%
13							
14	SUPPLEMENTAL LABOR LOADER (to be applied to direct labor):						7.87%
15							
16	STANDARD NON-LABOR OVERHEADS:						
17	Purchasing	3,683,003	2,834,924	2,117,320	8,635,248	1,694,157,961	0.51%
18							
19	INDIRECT SUPPORT OVERHEAD:						
20	Affiliate Billing A&G	1,498,718	5,927,712	861,597	8,288,027	25,028,014	33.12%
21							

Note (a): Payroll tax rate supplied by the Tax Department. See worksheet tab "PT".

Note (b): See worksheet tab, "Adjusted Recorded" for specific references of the 2016 Actual Labor and Non-Labor numbers.

Note (c): Pension & Benefits, Workers Compensation, PLPD and ICP were grossed up for Payroll Taxes, Line 2.

Supplemental Labor Loader, Purchasing and Affiliate Billing A&G were grossed up for Total Labor Overheads, Line 12.

Note (d): See worksheet tab, "Overhead Loading Base" for specific loading base details.

Note (e): Variable Pay is commonly referred to as the Incentive Compensation Plan ("ICP").

SOUTHERN CALIFORNIA GAS COMPANY
Derivation of 2016 Adjusted Recorded Pool Funding for Labor
Test Year 2019 General Rate Case

Line #	Category	2016 Adjusted Actual Labor (2016\$)	2016 Adjusted Actual Non-Labor (2016\$)	Worksheet Tab Reference
1	Pension & Benefits	1,343,102	199,990,925	<i>WP-23</i>
2				
3	Workers' Comp	860,127	8,618,102	<i>WP-24</i>
4				
5	PLPD	494,616	28,403,418	<i>WP-25</i>
6				
7	ICP	57,386,898		<i>WP-26</i>
8				
9	Purchasing	3,683,003	2,834,924	<i>WP-27</i>
10				
11	Affiliate Billing A&G	1,498,718	5,927,712	<i>WP-28</i>

**SOUTHERN CALIFORNIA GAS COMPANY
Loading Base Derivation for Shared Services Overheads
Test Year 2019 General Rate Case**

Line #	Description	Amount (2016\$)
1	TOTAL COMPANY LABOR:	
2	Account (Cost Element) Range 6110000 to 6119999	810,778,533
3	Exclude ICP payout:	(60,445,593)
4	Total GRC Labor Overhead Loading Base:	750,332,940
5		
6	TOTAL COMPANY NON-UNION LABOR:	
7	Account (Cost Element) Range 6110000 to 6119999	810,778,533
8	Exclude ICP payout:	(60,445,593)
9	Exclude Union labor:	(409,218,737)
10	Total GRC ICP Overhead Loading Base:	341,114,203
11		
12	TOTAL COMPANY PURCHASING NON-LABOR:	
13	Account (Cost Element) Range 6210000 to 6232999	1,694,157,961
14	Total GRC Non-Labor Overhead Loading Base:	1,694,157,961
15		
16		
17		
18	TOTAL AFFILIATE BILLING LABOR & NON-LABOR:	
19	Account (Cost Element) Group 'AG_BASE' 6110010 to 6119999	13,307,431
20	Gross up with V&S factor (16.32%)	2,172,085
21	Account (Cost Element) Group 'AG_BASE' 6130000 TO 6400410, exc. Fleet	9,548,498
22	Total Grossed up Loading Base for Affiliate Billing A&G:	25,028,014

Notes:

Line 20 - Vacation and Sick (V&S) Factors for 2016 - 2019 applicable to forecast O&M and capital labor costs and hours are based on a 3-yr avg rate through 2016 recorded V&S data.

SOUTHERN CALIFORNIA GAS COMPANY
Payroll Tax Rates
Test Year 2019 General Rate Case

Line		
#	Year	Rate
1	2016	7.51%
2	2017	7.58%
3	2018	7.43%
4	2019	7.44%

Notes:

The Payroll Tax rates were provided by the Tax Department.

SOUTHERN CALIFORNIA GAS COMPANY
2016 Pension and Benefits (P&B) Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case

		(2016\$)
Line #	A Internal Orders 300346848, 300364319 - Pool Pension & Benefits:	
1	Labor Costs	1,343,102
2	Non-Labor Costs:	
3	Emp Ben-Health Insurance	78,822,551.52
4	Emp Ben-Dental Insurance	2,587,103.35
5	Emp Ben-Vision Insurance	575,226.21
6	Emp Ben-Life Insurance	1,715,197.08
7	Emp Ben-Fees & Srv \$	1,115,166.34
8	Emp Ben-Emp Asst Pgr	727,991.20
9	Emp Ben-Emp Well Pgr	361,856.86
10	Emp Ben-Long Term Disability	(1,794,397.69)
11	Emp Ben-Annual Benefit	320,577.50
12	Emp Ben-Educ Assist	957,108.10
13	Emp Ben-Transp Allow	812,020.19
14	Emp Ben-Ymca-Imputable	251,649.95
15	Emp Ben-Emp Relocation	18,279.58
16	Emp Ben-Ad&D Insuran	58,609.95
17	Emp Ben-Serp Exp Actives	2,286,894.00
18	Emp Ben-Rsp Company Match	20,663,491.11
19	Emp Benefits-Incentive Match	1,907,481.00
20	Emp Ben-Ret Towrkexm	40,117.00
21	Emp Ben-Pbop Med-Rep	226,962.10
22	Emp Ben-Pbop Non-Rep Life I	44,049.69
23	Emp Ben-Retireact	159,027.65
24	Emp Ben-Pension Funding	70,350,433.00
25	Emp Ben-Mental Health	1,389,218.60
26	Emp Ben-Misc	(446,151.60)
27	P&B Group Non Labor Expenses	8,749,884.45
28	Intercompany Charges	<u>9,627,148.66</u>
29		201,527,496
30	Total:	<u>202,870,598</u>
31		
32	B G/L Acct 1334042 & 1334043 - Clear A/C-P&B:	
33	Labor Costs	-
34	Non-Labor Costs	-
35	Total:	-
36		
37	C=A+B 2016 P&B Overhead Pool Funding Before Adjustment:	
38	Labor Costs	1,343,102
39	Non-Labor Costs	201,527,496
40	Total:	<u>202,870,598</u>
41		
42	D Adjustment to P&B Overhead Pool Funding:	
43	Labor Costs	-
44	Non-Labor Costs, Accruals	(1,536,571)
45	Total:	<u>(1,536,571)</u>
46		
47	E=C+D Adjusted Recorded P&B Overhead Pool Funding:	
48	Labor Costs	1,343,102
49	Non-Labor Costs	199,990,925
50	Total:	<u>201,334,027</u>

**SOUTHERN CALIFORNIA GAS COMPANY
2016 Worker's Compensation Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case**

		<u>(2016\$)</u>
Line #	A	Internal Orders 300346847 - Pool Worker's Compensation:
1		Labor Costs 860,127
2		Non-Labor Costs:
3		Emp Ben-Wkrcompmed 4,788,732.14
4		Emp Ben-Wkrcompoth 3,565,621.95
5		Emp Ben-Workers' Comp Adjustment (4,401,824.55)
6		Emp Ben-Wcompidem 8,807,150.37
7		Emp Ben-Wcompadmin 1,221,798.45
8		Emp Ben-Workers Comp-Refunds (2,001,780.91)
9		A&G-Injuries & Damages 1,355,076.30
10		Claims Group non labor expenses 125,080.28
11		Intercompany Charges <u>66,823.50</u>
12		13,526,678
13		Total: <u>14,386,805</u>
14		
15	B	G/L Acct 1334001 - Clear A/C-WC:
16		Labor Costs -
17		Non-Labor Costs -
18		Total: -
19		
20	C=A+B	2016 WC Overhead Pool Funding Before Adjustment:
21		Labor Costs 860,127
22		Non-Labor Costs 13,526,678
23		Total: <u>14,386,805</u>
24		
25	D	Adjustment to WC Overhead Pool Funding:
26		Labor Costs -
27		Non-Labor Costs, Accruals (4,908,576)
28		Total: <u>(4,908,576)</u>
29		
30	E=C+D	Adjusted Recorded WC Overhead Pool Funding:
31		Labor Costs 860,127
32		Non-Labor Costs 8,618,102
33		Total: <u>9,478,229</u>

**SOUTHERN CALIFORNIA GAS COMPANY
2016 PLPD Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case**

			<u>(2016\$)</u>
Line #	A	Internal Orders 300346826 - Pool PLPD:	
1		Labor Costs	494,616
2		Non-Labor Costs:	
3		A&G-Injuries & Damages	26,126,078.01
4		Disability Management Group non labor expenses	105,807.53
5		Intercompany Charges	<u>480,220.36</u>
6			26,712,106
7		Total:	<u>27,206,722</u>
8			
9	B	G/L Acct 1334002 - Clear A/C-PLPD:	
10		Labor Costs	-
11		Non-Labor Costs	-
12		Total:	<u>-</u>
13			
14	C=A+B	2016 PLPD Overhead Pool Funding Before Adjustment:	
15		Labor Costs	494,616
16		Non-Labor Costs	26,712,106
17		Total:	<u>27,206,722</u>
18			
19	D	Adjustment to PLPD Overhead Pool Funding:	
20		Labor Costs	-
21		Non-Labor Costs, Accruals	1,691,312
22		Total:	<u>1,691,312</u>
23			
24	E=C+D	Adjusted Recorded PLPD Overhead Pool Funding:	
25		Labor Costs	494,616
26		Non-Labor Costs	28,403,418
27		Total:	<u><u>28,898,034</u></u>

**SOUTHERN CALIFORNIA GAS COMPANY
2016 Variable Pay Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case**

		<u>(2016\$)</u>
Line #	A Internal Orders 200314765 - Pool Variable Pay:	
1	Labor Costs	62,085,580
2	Non-Labor Costs:	-
3	Total:	<u>62,085,580</u>
4		
5	B G/L Acct 1334047 - Clear A/C-Variable Pay:	
6	Labor Costs	-
7	Non-Labor Costs	-
8	Total:	<u>-</u>
9		
10	C=A+B 2016 Variable Pay Overhead Pool Funding Before Adjustment:	
11	Labor Costs	62,085,580
12	Non-Labor Costs	-
13	Total:	<u>62,085,580</u>
14		
15	D Adjustment to Variable Pay Overhead Pool Funding:	
16	Labor Costs	
17	2017 VARIABLE PAY TRUE-UP ACCRUAL TO PAYMENT	8,398,374.00
18	2016 VARIABLE PAY TRUE-UP ACCRUAL TO PAYMENT (for 2015)	1,932,571.66
19	Non-Recorded Adjustment ¹	(15,029,628.47)
20		(4,698,683)
21	Non-Labor Costs	-
22	Total:	<u>(4,698,683)</u>
23		
24	E=C+D	
25	Adjusted Recorded Variable Pay Overhead Pool Funding:	
26	Labor Costs	57,386,898
27	Non-Labor Costs	-
28	Total:	<u>57,386,898</u>

Footnote:

¹ Non-Recorded Adjustment ensures Variable Pay reflects target of 100%

**SOUTHERN CALIFORNIA GAS COMPANY
2016 Purchasing Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case**

			<u>(2016\$)</u>
Line #	A	Internal Orders 200314773 - Pool Purchasing:	
1		Labor Costs	3,683,003
2		Non-Labor Costs:	1,495,203.71
3		Purchasing Group Non Labor Expenses	<u>1,339,720.68</u>
4			2,834,924
5		Total:	<u>6,517,927</u>
6			
7	B	G/L Acct 1334055 - Clear A/C-Purchasing:	
8		Labor Costs	-
9		Non-Labor Costs	-
10		Total:	<u>-</u>
11			
12	C=A+B	2016 Purchasing Overhead Pool Funding Before Adjustment:	
13		Labor Costs	3,683,003
14		Non-Labor Costs	2,834,924
15		Total:	<u>6,517,927</u>
16			
17	D	Adjustment to Purchasing Overhead Pool Funding:	
18		Labor Costs	-
19		Non-Labor Costs	-
20		Total:	<u>-</u>
21			
22	E=C+D	Adjusted Recorded Purchasing Overhead Pool Funding:	
23		Labor Costs	3,683,003
24		Non-Labor Costs	2,834,924
25		Total:	<u><u>6,517,927</u></u>

**SOUTHERN CALIFORNIA GAS COMPANY
2016 Affiliate A&G Overhead Pool Funding Breakdown
Test Year 2019 General Rate Case**

		<u>(2016\$)</u>
Line #	A	Internal Orders 300346861 - Pool Affiliate A&G:
1		Labor Costs 1,498,718
2		Non-Labor Costs:
3		Affiliate Billing Administrative & General (A&G) Group non labor expenses 1,794,367.57
4		Intercompany charges <u>4,133,344.92</u>
5		5,927,712
6		Total: <u>7,426,430</u>
7		
8	B	G/L Acct 1334097 - Clear A/C-Affiliate A&G:
9		Labor Costs -
10		Non-Labor Costs -
11		Total: <u>-</u>
12		
13	C=A+B	2016 Affiliate A&G Overhead Pool Funding Before Adjustment:
14		Labor Costs 1,498,718
15		Non-Labor Costs 5,927,712
16		Total: <u>7,426,430</u>
17		
18	D	Adjustment to Affiliate A&G Overhead Pool Funding:
19		Labor Costs -
20		Non-Labor Costs -
21		Total: <u>-</u>
22		
23	E=C+D	Adjusted Recorded Purchasing Overhead Pool Funding:
24		Labor Costs 1,498,718
25		Non-Labor Costs 5,927,712
26		Total: <u><u>7,426,430</u></u>

SOUTHERN CALIFORNIA GAS COMPANY
Vacation & Sick (V&S) Rates
Test Year 2019 General Rate Case

Line	Year	1-Yr Rate	3-Yr Avg Rate
1	2013	16.62%	
2	2014	16.32%	
3	2015	16.18%	
4	2016	16.47%	16.32%
5	2017		16.32%
6	2018		16.32%
7	2019		16.32%

Notes:

Use 3-Yr Avg Rate to Gross-Up Affiliate Billing OH labor base.

SOUTHERN CALIFORNIA GAS COMPANY
Vacation & Sick (V&S) Detail for GRC
Test Year 2019 General Rate Case

	Recorded Expense	V&S Hours	V&S Base	V&S Base Hours	V&S Percent Before Adj	Vacation Bought/Sold	Expense Less Adjustments	V&S Percent After Adj
January	12,054,828.67	326,776.54	43,162,536.58	1,124,997.80		(159,105.63)	12,213,934.30	28.30%
February	6,072,806.73	175,948.09	42,321,521.23	1,119,439.34		(155,031.21)	6,227,837.94	14.72%
March	6,115,417.73	172,290.39	46,689,601.95	1,209,007.26		(154,480.75)	6,269,898.48	13.43%
April	6,452,727.55	180,020.50	46,440,132.11	1,238,584.33		(151,944.56)	6,604,672.11	14.22%
2 May	5,302,334.61	151,437.90	49,917,656.21	1,326,888.84		(148,027.92)	5,450,362.53	10.92%
0 June	7,335,394.38	199,713.21	40,658,964.39	1,078,116.20		(145,822.45)	7,481,216.83	18.40%
1 July	9,589,869.06	264,624.59	45,964,592.95	1,201,910.43		(148,236.96)	9,738,106.02	21.19%
3 August	6,444,798.67	177,785.05	46,465,866.65	1,228,625.59		(121,181.67)	6,565,980.34	14.13%
September	9,162,573.44	251,770.08	42,531,502.38	1,104,969.54		(188,890.41)	9,351,463.85	21.99%
October	2,295,869.19	59,984.32	53,834,852.44	1,421,204.31		(210,635.78)	2,506,504.97	4.66%
November	7,108,249.59	171,497.43	46,225,316.50	1,206,673.33		(64,907.55)	7,173,157.14	15.52%
December	11,582,085.86	303,364.87	45,298,690.38	1,151,245.80		(139,704.97)	11,721,790.83	25.88%
Total	89,516,955.48	2,435,212.97	549,511,233.77	14,411,662.77	16.29%	(1,787,969.86)	91,304,925.34	16.62%

	Recorded Expense	V&S Hours	V&S Base	V&S Base Hours	V&S Percent Before Adj	Vacation Bought/Sold	Expense Less Adjustments	V&S Percent After Adj
January	13,915,320.42	364,167.05	43,446,682.30	1,122,462.51		(50,457.01)	13,965,777.43	32.14%
February	6,130,991.42	172,467.00	43,329,866.82	1,120,847.29		(180,822.48)	6,311,813.90	14.57%
March	6,362,678.02	174,025.14	48,767,630.01	1,219,315.16		(178,820.73)	6,541,498.75	13.41%
April	6,403,723.40	177,762.48	49,755,402.05	1,272,068.88		(386,742.61)	6,790,466.01	13.65%
2 May	5,488,114.72	150,656.34	49,519,795.52	1,272,647.48		(86,180.39)	5,574,295.11	11.26%
0 June	7,802,309.00	209,226.19	45,111,795.26	1,158,932.26		(170,324.66)	7,972,633.66	17.67%
1 July	9,733,678.35	255,026.17	48,790,510.29	1,257,058.75		(167,808.33)	9,901,486.68	20.29%
4 August	5,838,974.05	156,353.68	48,052,493.93	1,225,900.83		(167,900.66)	6,006,874.71	12.50%
September	9,751,034.58	259,473.25	46,554,728.42	1,185,352.97		(167,801.31)	9,918,835.89	21.31%
October	2,672,961.07	75,452.72	57,418,499.97	1,460,437.30		(163,280.04)	2,836,241.11	4.94%
November	6,618,866.54	179,344.37	47,785,750.65	1,189,814.33		(165,847.23)	6,784,713.77	14.20%
December	11,875,852.37	302,055.71	51,495,074.65	1,271,999.77		(164,102.71)	12,039,955.08	23.38%
Total	92,594,503.94	2,476,010.10	580,028,229.87	14,756,837.54	15.96%	(2,050,088.16)	94,644,592.10	16.32%

	Recorded Expense	V&S Hours	V&S Base	V&S Base Hours	V&S Percent Before Adj	Vacation Bought/Sold	Expense Less Adjustments	V&S Percent After Adj
January	15,367,095.52	392,822.35	43,992,964.14	1,093,700.98		(179,760.79)	15,546,856.31	35.34%
February	6,367,733.46	174,445.58	46,907,045.77	1,166,928.40		(180,507.02)	6,548,240.48	13.96%
March	6,668,772.47	181,343.30	53,504,238.19	1,305,007.24		(178,869.05)	6,847,641.52	12.80%
April	7,047,161.19	189,062.15	52,871,296.01	1,293,527.13		(266,124.15)	7,313,285.34	13.83%
2 May	5,617,202.88	148,581.87	51,472,855.13	1,263,415.44		(85,884.17)	5,703,087.05	11.08%
0 June	8,698,903.87	225,677.40	51,148,008.21	1,254,004.87		(166,378.97)	8,865,282.84	17.33%
1 July	9,108,171.06	234,225.78	52,881,112.79	1,313,706.61		(169,112.88)	9,277,283.94	17.54%
5 August	6,333,790.67	165,254.59	50,681,095.34	1,251,885.35		(166,378.57)	6,500,169.24	12.83%
September	8,379,920.74	222,893.81	51,006,482.96	1,257,279.44		(245,425.28)	8,625,346.02	16.91%
October	4,594,474.68	112,255.29	56,010,469.10	1,367,874.10		(73,943.47)	4,668,418.15	8.33%
November	7,248,483.15	189,220.08	52,604,117.04	1,267,005.86		(164,425.73)	7,412,908.88	14.09%
December	12,508,312.66	306,520.19	54,869,102.48	1,300,828.05		(165,546.50)	12,673,859.16	23.10%
Total	97,940,022.35	2,542,302.39	617,948,787.16	15,135,163.47	15.85%	(2,042,356.58)	99,982,378.93	16.18%

	Recorded Expense	V&S Hours	V&S Base	V&S Base Hours	V&S Percent Before Adj	Vacation Bought/Sold	Expense Less Adjustments	V&S Percent After Adj
January	16,022,842.16	394,810.40	45,694,487.38	1,090,445.67		(201,949.05)	16,224,791.21	35.51%
February	6,743,182.54	174,829.38	50,997,253.03	1,221,767.72		(201,767.27)	6,944,949.81	13.62%
March	8,539,896.28	218,349.08	59,878,718.03	1,418,071.66		(298,458.75)	8,838,355.03	14.76%
April	5,738,174.70	146,224.07	54,242,152.02	1,295,623.39		(221,796.00)	5,959,970.70	10.99%
2 May	5,714,386.20	143,844.71	56,624,351.66	1,350,351.57		(194,578.14)	5,908,964.34	10.44%
0 June	9,118,046.86	226,050.52	53,537,938.17	1,266,033.59		(191,129.72)	9,309,176.58	17.39%
1 July	12,524,179.10	304,359.10	46,827,145.71	1,109,288.18		(188,571.46)	12,712,750.56	27.15%
6 August	4,222,897.72	106,600.06	61,708,299.18	1,455,910.87		(277,733.89)	4,500,631.61	7.29%
September	8,149,659.62	202,398.12	54,263,321.18	1,270,644.54		(207,626.78)	8,357,286.40	15.40%
October	5,243,038.69	129,357.35	54,224,781.71	1,270,519.99		(187,506.45)	5,430,545.14	10.01%
November	7,867,086.13	198,631.80	54,258,610.32	1,262,741.51		(184,315.40)	8,051,401.53	14.84%
December	14,316,296.63	324,822.95	54,466,790.66	1,183,232.95		39,236.18	14,277,060.45	26.21%
Total	104,199,686.63	2,570,277.54	646,723,849.05	15,194,631.65	16.11%	(2,316,196.73)	106,515,883.36	16.47%

*2016 based on BW report

3 Years Average 2014-2016

16.32%

SAN DIEGO GAS & ELECTRIC
Shared Services Directs
Test Year 2019 General Rate Case

Incurred (100% Level Forecast)		2016				2017				2018				2019			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
Functional Area	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	11,112	2,275	-	13,387	11,717	2,204	-	13,921	11,717	2,111	-	13,828	11,717	2,139	-	13,856
	CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CS - INFORMATION & TECHNOLOGIES	94	249	-	343	94	249	-	344	94	249	-	344	94	249	-	344
	CYBERSECURITY	3,511	470	2,587	6,568	3,840	581	2,700	7,121	3,956	581	2,850	7,387	3,956	581	3,370	7,907
	ELECTRIC GENERATION & SONGS	505	241	-	746	833	261	-	1,095	833	261	-	1,095	833	261	-	1,095
	ENVIRONMENTAL	1,951	561	-	2,512	1,368	551	-	1,918	1,458	560	-	2,017	1,548	560	-	2,107
	FLEET SERVICES	904	452	-	1,356	1,243	296	-	1,539	1,321	296	-	1,617	1,321	296	-	1,617
	GAS SYSTEM INTEGRITY	-	-	-	-	-	600	-	600	-	600	-	600	-	600	-	600
	HR, DISABILITY, WORKERS COMP & SAFETY	3,314	806	-	4,120	3,313	1,158	-	4,471	3,403	1,173	-	4,576	3,403	1,203	-	4,606
	INFORMATION TECHNOLOGY	21,356	34,268	-	55,624	21,707	34,791	-	56,499	21,707	35,739	-	57,447	21,707	37,001	-	58,709
	REAL ESTATE & FACILITIES	1,725	4,774	-	6,499	1,671	4,617	-	6,288	1,671	4,617	-	6,288	1,671	4,617	-	6,288
	RISK MANAGEMENT	1,797	2,484	-	4,281	2,043	2,899	-	4,942	2,281	3,562	-	5,843	2,520	4,224	-	6,744
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	2,642	1,616	-	4,258	2,843	1,155	-	3,998	3,166	1,155	-	4,321	3,166	1,522	-	4,688
Totals		48,911	48,196	2,587	99,694	50,673	49,362	2,700	102,735	51,608	50,904	2,850	105,362	51,936	53,253	3,370	108,559
	sdge/ro	48,911	48,196	2,587		50,673	49,362	2,700		51,608	50,904	2,850		51,936	53,253	3,370	

Allocations Out		2016				2017				2018				2019			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
Functional Area	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	2,869	442	-	3,312	3,203	514	-	3,717	3,203	469	-	3,672	3,203	467	-	3,670
	CS - FIELD	-	(1)	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-
	CS - INFORMATION & TECHNOLOGIES	85	8	-	93	85	8	-	93	85	8	-	93	85	8	-	93
	CYBERSECURITY	2,237	285	1,694	4,217	2,385	322	1,717	4,424	2,458	322	1,812	4,593	2,458	322	2,143	4,923
	ELECTRIC GENERATION & SONGS	41	20	-	61	69	22	-	90	69	22	-	90	69	22	-	90
	ENVIRONMENTAL	365	75	-	440	196	56	-	251	196	56	-	251	196	56	-	251
	FLEET SERVICES	255	143	-	399	415	112	-	527	454	114	-	568	454	114	-	568
	GAS SYSTEM INTEGRITY	-	-	-	-	-	520	-	520	-	520	-	520	-	520	-	520
	HR, DISABILITY, WORKERS COMP & SAFETY	253	44	-	297	253	80	-	333	262	88	-	349	262	91	-	353
	INFORMATION TECHNOLOGY	11,510	18,160	-	29,669	11,686	18,152	-	29,838	11,686	18,816	-	30,503	11,686	19,517	-	31,204
	REAL ESTATE & FACILITIES	388	851	-	1,239	345	845	-	1,190	345	845	-	1,190	345	845	-	1,190
	RISK MANAGEMENT	803	1,044	-	1,848	922	1,237	-	2,159	1,033	1,520	-	2,553	1,144	1,803	-	2,947
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1,056	131	-	1,187	1,197	625	-	1,822	1,359	625	-	1,984	1,359	809	-	2,167
Totals		19,862	21,203	1,694	42,760	20,755	22,493	1,717	44,965	21,149	23,405	1,812	46,367	21,260	24,574	2,143	47,977
	sdge/ro	19,862	21,203	1,694		20,755	22,493	1,717		21,149	23,405	1,812		21,260	24,574	2,143	

SAN DIEGO GAS & ELECTRIC
Shared Services Directs
Test Year 2019 General Rate Case

Retained		2016				2017				2018				2019			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
Functional Area	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	8,243	1,833	-	10,075	8,514	1,690	-	10,204	8,514	1,642	-	10,156	8,514	1,672	-	10,186
	CS - FIELD	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
	CS - INFORMATION & TECHNOLOGIES	9	241	-	250	9	241	-	250	9	241	-	250	9	241	-	250
	CYBERSECURITY	1,274	185	893	2,351	1,455	259	983	2,697	1,497	259	1,038	2,794	1,497	259	1,227	2,984
	ELECTRIC GENERATION & SONGS	464	221	-	685	765	240	-	1,004	765	240	-	1,004	765	240	-	1,004
	ENVIRONMENTAL	1,586	486	-	2,072	1,172	495	-	1,667	1,262	504	-	1,766	1,352	504	-	1,856
	FLEET SERVICES	649	309	-	957	829	183	-	1,012	867	182	-	1,049	867	182	-	1,049
	GAS SYSTEM INTEGRITY	-	-	-	-	-	80	-	80	-	80	-	80	-	80	-	80
	HR, DISABILITY, WORKERS COMP & SAFETY	3,061	762	-	3,823	3,060	1,077	-	4,138	3,142	1,085	-	4,226	3,142	1,112	-	4,253
	INFORMATION TECHNOLOGY	9,846	16,108	-	25,955	10,021	16,640	-	26,661	10,021	16,923	-	26,944	10,021	17,484	-	27,505
	REAL ESTATE & FACILITIES	1,337	3,923	-	5,260	1,326	3,772	-	5,098	1,326	3,772	-	5,098	1,326	3,772	-	5,098
	RISK MANAGEMENT	994	1,440	-	2,433	1,122	1,662	-	2,784	1,249	2,041	-	3,290	1,376	2,421	-	3,797
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1,586	1,485	-	3,071	1,645	530	-	2,175	1,807	530	-	2,337	1,807	714	-	2,520
Totals		29,049	26,993	893	56,934	29,917	26,869	983	57,770	30,458	27,499	1,038	58,995	30,675	28,679	1,227	60,582
	sdge/ro	29,049	26,993	893		29,917	26,869	983		30,458	27,499	1,038		30,675	28,679	1,227	

Allocations In		2016				2017				2018				2019			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
Functional Area	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	1,235	(9)	-	1,226	1,666	185	-	1,851	1,774	223	-	1,997	1,773	223	-	1,996
	CS - FIELD	1,966	653	3	2,622	1,868	621	3	2,492	1,868	613	3	2,484	1,868	613	3	2,484
	CS - INFORMATION & TECHNOLOGIES	210	129	-	339	281	148	-	429	350	172	-	522	379	206	-	585
	CYBERSECURITY	35	47	-	82	114	130	-	244	114	130	-	244	114	130	-	244
	ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ENVIRONMENTAL	20	22	-	42	27	5	-	32	28	5	-	33	29	5	-	34
	FLEET SERVICES	698	458	-	1,156	684	512	-	1,196	743	512	-	1,255	743	512	-	1,255
	GAS SYSTEM INTEGRITY	2,610	491	-	3,101	5,471	657	-	6,128	5,905	693	-	6,597	7,371	888	-	8,258
	HR, DISABILITY, WORKERS COMP & SAFETY	135	5	-	140	135	5	-	140	135	5	-	140	135	5	-	140
	INFORMATION TECHNOLOGY	2,948	532	-	3,480	3,200	644	-	3,845	3,314	653	-	3,967	3,314	653	-	3,967
	REAL ESTATE & FACILITIES	-	(9)	682	674	-	-	738	738	-	780	780	-	-	-	784	784
	RISK MANAGEMENT	138	8	-	146	138	8	-	146	138	8	-	146	138	8	-	146
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	117	(658)	-	(540)	120	(658)	-	(538)	120	(658)	-	(538)	120	(658)	-	(538)
Totals		10,113	1,671	685	12,468	13,705	2,257	741	16,703	14,489	2,356	783	17,628	15,984	2,584	786	19,355
	sdge/ro	10,113	1,671	685		13,705	2,257	741		14,489	2,356	783		15,984	2,584	786	

SAN DIEGO GAS & ELECTRIC
Shared Services Directs
Test Year 2019 General Rate Case

Functional Area		2016				2017				2018				2019			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
Total Net Shared Services (Directs)																	
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS		9,478	1,824	-	11,301	10,180	1,875	-	12,055	10,288	1,865	-	12,153	10,287	1,895	-	12,182
CS - FIELD		1,966	654	3	2,623	1,868	621	3	2,492	1,868	613	3	2,484	1,868	613	3	2,484
CS - INFORMATION & TECHNOLOGIES		219	370	-	589	290	389	-	679	359	413	-	772	389	446	-	835
CYBERSECURITY		1,309	232	893	2,433	1,570	389	983	2,942	1,612	389	1,038	3,039	1,612	389	1,227	3,228
ELECTRIC GENERATION & SONGS		464	221	-	685	765	240	-	1,004	765	240	-	1,004	765	240	-	1,004
ENVIRONMENTAL		1,606	508	-	2,114	1,199	500	-	1,699	1,290	509	-	1,799	1,381	509	-	1,890
FLEET SERVICES		1,347	767	-	2,114	1,513	695	-	2,208	1,610	693	-	2,304	1,610	693	-	2,304
GAS SYSTEM INTEGRITY		2,610	491	-	3,101	5,471	737	-	6,208	5,905	773	-	6,678	7,371	968	-	8,338
HR, DISABILITY, WORKERS COMP & SAFETY		3,197	767	-	3,964	3,196	1,082	-	4,278	3,277	1,090	-	4,367	3,277	1,117	-	4,394
INFORMATION TECHNOLOGY		12,794	16,640	-	29,435	13,221	17,284	-	30,505	13,335	17,576	-	30,911	13,335	18,137	-	31,472
REAL ESTATE & FACILITIES		1,337	3,914	682	5,934	1,326	3,772	738	5,836	1,326	3,772	780	5,878	1,326	3,772	784	5,881
RISK MANAGEMENT		1,132	1,447	-	2,579	1,260	1,669	-	2,929	1,387	2,049	-	3,436	1,514	2,428	-	3,942
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY		1,703	827	-	2,531	1,765	(127)	-	1,638	1,927	(127)	-	1,799	1,927	56	-	1,983
Totals		39,161	28,664	1,577	69,402	43,622	29,126	1,724	74,473	44,948	29,855	1,820	76,623	46,660	31,263	2,014	79,937

SAN DIEGO GAS & ELECTRIC
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

YEAR 2016	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2016				2016				2016			
	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
TOTAL RETAINED AMOUNT	29,049	26,993	893	56,934	-	-	-	-	29,049	26,993	893	56,934
Allocations Out												
SCG												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	2,512	349	-	2,861	1,880	99	-	1,980	4,392	449	-	4,841
CS - FIELD	-	(1)	-	(1)	-	(0)	-	(0)	-	(1)	-	(1)
CS - INFORMATION & TECHNOLOGIES	85	8	-	93	63	2	-	66	148	10	-	159
CYBER SECURITY	2,111	269	1,602	3,982	1,581	77	456	2,113	3,692	346	2,057	6,095
ELECTRIC GENERATION & SONGS	41	20	-	61	31	6	-	37	73	25	-	98
ENVIRONMENTAL	352	73	-	425	264	21	-	285	616	94	-	710
FLEET SERVICES	255	143	-	399	191	41	-	232	446	184	-	631
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	117	5	-	123	88	2	-	89	205	7	-	212
INFORMATION TECHNOLOGY	10,742	17,123	-	27,865	8,043	4,871	-	12,914	18,785	21,994	-	40,779
REAL ESTATE & FACILITIES	79	565	-	643	59	161	-	219	137	725	-	863
RISK MANAGEMENT	803	1,044	-	1,848	601	297	-	899	1,405	1,341	-	2,746
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	857	99	-	956	642	28	-	670	1,499	127	-	1,626
Totals	17,956	19,697	1,602	39,255	13,444	5,604	456	19,503	31,400	25,301	2,057	58,758
Corporate Center												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	343	84	-	427	282	24	-	306	625	108	-	733
CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION & TECHNOLOGIES	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	126	16	93	235	103	5	26	134	229	21	119	369
ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRONMENTAL	9	1	-	10	7	0	-	8	17	2	-	18
FLEET SERVICES	-	-	-	-	-	-	-	-	-	-	-	-
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	82	24	-	106	67	7	-	74	149	31	-	179
INFORMATION TECHNOLOGY	744	771	-	1,515	612	219	-	831	1,356	990	-	2,346
REAL ESTATE & FACILITIES	194	185	-	380	160	53	-	213	354	238	-	592
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	190	25	-	215	156	7	-	164	347	32	-	379
Totals	1,688	1,106	93	2,887	1,388	315	26	1,729	3,076	1,420	119	4,616

SAN DIEGO GAS & ELECTRIC
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
		2016				2016				2016			
Unregulated Affiliates													
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	15	9	-	24	12	3	-	15	27	12	-	39
	CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
	CS - INFORMATION & TECHNOLOGIES	-	-	-	-	-	-	-	-	-	-	-	-
	CYBER SECURITY	-	-	-	-	-	-	-	-	-	-	-	-
	ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-
	ENVIRONMENTAL	3	1	-	4	3	0	-	3	6	1	-	7
	FLEET SERVICES	-	-	-	-	-	-	-	-	-	-	-	-
	GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
	HR, DISABILITY, WORKERS COMP & SAFETY	54	15	-	68	44	4	-	48	98	19	-	117
	INFORMATION TECHNOLOGY	23	266	-	290	19	76	-	95	42	342	-	384
	REAL ESTATE & FACILITIES	115	101	-	216	94	29	-	123	209	130	-	339
	RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	9	7	-	16	7	2	-	9	16	10	-	25
Totals		218	400	-	618	179	114	-	293	397	514	-	912
TOTAL ALLOCATIONS OUT		19,862	21,203	1,694	42,760	15,011	6,032	482	21,525	34,873	27,235	2,177	64,285
sdge/ro		19,862	21,203	1,694		15,011	6,032	482					
TOTAL SDG&E Shared Services Forecast		48,911	48,196	2,587	99,694	15,011	6,032	482	21,525	63,922	54,228	3,069	121,219

<u>Overhead Rates</u>	<u>Year</u>	<u>Lab %</u>	<u>Nlab %</u>	<u>NSE %</u>
Bill to SCG	2016	74.87%	28.45%	28.45%
Bill to CorpCtr/Unregulated Affiliates	2016	82.21%	28.45%	28.45%

SAN DIEGO GAS & ELECTRIC
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

YEAR 2017		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
		2017				2017				2017			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
TOTAL RETAINED AMOUNT		29,917	26,869	983	57,770	-	-	-	-	29,917	26,869	983	57,770
Allocations Out													
SCG													
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	2,900	414	-	3,314	2,175	118	-	2,293	5,075	532	-	5,607
	CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
	CS - INFORMATION & TECHNOLOGIES	85	8	-	93	64	2	-	66	149	11	-	160
	CYBER SECURITY	2,248	304	1,618	4,170	1,686	87	461	2,233	3,934	390	2,079	6,403
	ELECTRIC GENERATION & SONGS	69	22	-	90	52	6	-	58	120	28	-	148
	ENVIRONMENTAL	189	54	-	243	142	15	-	157	331	69	-	400
	FLEET SERVICES	415	112	-	527	311	32	-	343	726	144	-	870
	GAS SYSTEM INTEGRITY	-	520	-	520	-	148	-	148	-	668	-	668
	HR, DISABILITY, WORKERS COMP & SAFETY	118	32	-	150	88	9	-	97	206	42	-	247
	INFORMATION TECHNOLOGY	11,041	17,225	-	28,266	8,280	4,902	-	13,182	19,321	22,127	-	41,448
	REAL ESTATE & FACILITIES	94	578	-	671	70	164	-	235	164	742	-	906
	RISK MANAGEMENT	922	1,237	-	2,159	691	352	-	1,043	1,613	1,589	-	3,202
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1,053	84	-	1,137	790	24	-	814	1,842	108	-	1,951
Totals		19,133	20,590	1,618	41,342	14,348	5,860	461	20,668	33,480	26,451	2,079	62,010
Corporate Center													
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	288	89	-	377	237	25	-	263	525	115	-	640
	CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
	CS - INFORMATION & TECHNOLOGIES	-	-	-	-	-	-	-	-	-	-	-	-
	CYBER SECURITY	137	18	98	253	112	5	28	146	249	24	126	399
	ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-
	ENVIRONMENTAL	3	1	-	4	3	0	-	3	6	1	-	7
	FLEET SERVICES	-	-	-	-	-	-	-	-	-	-	-	-
	GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
	HR, DISABILITY, WORKERS COMP & SAFETY	82	33	-	115	67	9	-	77	149	43	-	192
	INFORMATION TECHNOLOGY	621	756	-	1,377	512	215	-	727	1,133	971	-	2,104
	REAL ESTATE & FACILITIES	158	172	-	330	130	49	-	179	288	221	-	509
	RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	131	459	-	590	108	131	-	239	239	589	-	828
Totals		1,420	1,529	98	3,047	1,169	435	28	1,632	2,589	1,964	126	4,679

SAN DIEGO GAS & ELECTRIC
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2017				2017				2017			
Unregulated Affiliates												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	15	10	-	25	12	3	-	15	28	13	-	41
CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION & TECHNOLOGIES	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	-	-	-	-	-	-	-	-	-	-	-	-
ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRONMENTAL	3	1	-	4	3	0	-	3	6	1	-	7
FLEET SERVICES	-	-	-	-	-	-	-	-	-	-	-	-
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	54	15	-	68	44	4	-	48	98	19	-	117
INFORMATION TECHNOLOGY	24	171	-	195	20	49	-	69	44	220	-	264
REAL ESTATE & FACILITIES	93	95	-	188	77	27	-	104	170	122	-	292
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	13	82	-	95	11	23	-	34	24	106	-	130
Totals	203	374	-	577	167	106	-	273	370	481	-	850
TOTAL ALLOCATIONS OUT												
	20,755	22,493	1,717	44,965	15,684	6,402	489	22,574	36,439	28,895	2,205	67,539
sdge/ro	20,755	22,493	1,717		15,684	6,402	489					
TOTAL SDG&E Shared Services Forecast	50,673	49,362	2,700	102,735	15,684	6,402	489	22,574	66,356	55,764	3,189	125,309

<u>Overhead Rates</u>	<u>Year</u>	<u>Lab %</u>	<u>Nlab %</u>	<u>NSE %</u>
Bill to SCG	2017	74.99%	28.46%	28.46%
Bill to CorpCtr/Unregulated Affiliates	2017	82.34%	28.46%	28.46%

SAN DIEGO GAS & ELECTRIC
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

YEAR 2018	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2018				2018				2018			
	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
TOTAL RETAINED AMOUNT	30,458	27,499	1,038	58,995	-	-	-	-	30,458	27,499	1,038	58,995
Allocations Out												
SCG												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	2,900	389	-	3,290	2,170	111	-	2,281	5,070	500	-	5,571
CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION & TECHNOLOGIES	85	8	-	93	64	2	-	66	149	11	-	159
CYBER SECURITY	2,318	304	1,708	4,330	1,734	86	486	2,307	4,052	390	2,194	6,637
ELECTRIC GENERATION & SONGS	69	22	-	90	52	6	-	58	120	28	-	148
ENVIRONMENTAL	189	54	-	243	141	15	-	157	331	69	-	400
FLEET SERVICES	454	114	-	568	340	32	-	372	794	146	-	940
GAS SYSTEM INTEGRITY	-	520	-	520	-	148	-	148	-	668	-	668
HR, DISABILITY, WORKERS COMP & SAFETY	118	34	-	152	88	10	-	98	205	44	-	250
INFORMATION TECHNOLOGY	11,041	17,851	-	28,892	8,263	5,079	-	13,342	19,304	22,930	-	42,234
REAL ESTATE & FACILITIES	94	578	-	671	70	164	-	234	164	742	-	906
RISK MANAGEMENT	1,033	1,520	-	2,553	773	433	-	1,205	1,806	1,953	-	3,758
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1,214	84	-	1,299	909	24	-	933	2,123	108	-	2,231
Totals	19,514	21,479	1,708	42,701	14,604	6,111	486	21,201	34,118	27,590	2,194	63,902
Corporate Center												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	288	72	-	360	237	20	-	257	525	92	-	617
CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION & TECHNOLOGIES	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	141	18	104	263	116	5	30	150	256	24	133	413
ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRONMENTAL	3	1	-	4	3	0	-	3	6	1	-	7
FLEET SERVICES	-	-	-	-	-	-	-	-	-	-	-	-
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	87	36	-	124	72	10	-	82	159	47	-	206
INFORMATION TECHNOLOGY	621	784	-	1,405	511	223	-	733	1,132	1,007	-	2,138
REAL ESTATE & FACILITIES	158	172	-	330	130	49	-	179	288	221	-	509
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	131	459	-	590	108	131	-	238	239	589	-	828
Totals	1,430	1,542	104	3,076	1,175	439	30	1,643	2,605	1,981	133	4,719

SAN DIEGO GAS & ELECTRIC
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
		2018				2018				2018			
Unregulated Affiliates													
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	15	8	-	23	12	2	-	15	28	10	-	38
	CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
	CS - INFORMATION & TECHNOLOGIES	-	-	-	-	-	-	-	-	-	-	-	-
	CYBER SECURITY	-	-	-	-	-	-	-	-	-	-	-	-
	ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-
	ENVIRONMENTAL	3	1	-	4	3	0	-	3	6	1	-	7
	FLEET SERVICES	-	-	-	-	-	-	-	-	-	-	-	-
	GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
	HR, DISABILITY, WORKERS COMP & SAFETY	57	17	-	74	47	5	-	51	103	22	-	125
	INFORMATION TECHNOLOGY	24	181	-	205	20	52	-	71	44	233	-	277
	REAL ESTATE & FACILITIES	93	95	-	188	77	27	-	104	170	122	-	292
	RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	13	82	-	95	11	23	-	34	24	106	-	130
Totals		206	384	-	590	169	109	-	278	375	493	-	868
TOTAL ALLOCATIONS OUT		21,149	23,405	1,812	46,367	15,948	6,659	516	23,123	37,098	30,064	2,328	69,489
sdge/ro		21,149	23,405	1,812		15,948	6,659	516					
TOTAL SDG&E Shared Services Forecast		51,608	50,904	2,850	105,362	15,948	6,659	516	23,123	67,556	57,563	3,366	128,484

<u>Overhead Rates</u>	<u>Year</u>	<u>Lab %</u>	<u>Nlab %</u>	<u>NSE %</u>
Bill to SCG	2018	74.84%	28.45%	28.45%
Bill to CorpCtr/Unregulated Affiliates	2018	82.18%	28.45%	28.45%

SAN DIEGO GAS & ELECTRIC
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

YEAR 2019	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2019				2019				2019			
	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
TOTAL RETAINED AMOUNT	30,675	28,679	1,227	60,582	-	-	-	-	30,675	28,679	1,227	60,582
Allocations Out												
SCG												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	2,900	387	-	3,287	2,171	110	-	2,281	5,071	498	-	5,568
CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION & TECHNOLOGIES	85	8	-	93	64	2	-	66	149	11	-	159
CYBER SECURITY	2,318	304	2,020	4,641	1,735	86	575	2,396	4,052	390	2,595	7,037
ELECTRIC GENERATION & SONGS	69	22	-	90	52	6	-	58	120	28	-	148
ENVIRONMENTAL	189	54	-	243	141	15	-	157	331	69	-	400
FLEET SERVICES	454	114	-	568	340	32	-	372	794	146	-	940
GAS SYSTEM INTEGRITY	-	520	-	520	-	148	-	148	-	668	-	668
HR, DISABILITY, WORKERS COMP & SAFETY	118	37	-	154	88	10	-	98	205	47	-	253
INFORMATION TECHNOLOGY	11,041	18,508	-	29,549	8,264	5,266	-	13,530	19,305	23,774	-	43,079
REAL ESTATE & FACILITIES	94	578	-	671	70	164	-	234	164	742	-	906
RISK MANAGEMENT	1,144	1,803	-	2,947	856	513	-	1,369	2,000	2,316	-	4,316
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1,214	268	-	1,482	909	76	-	985	2,123	344	-	2,467
Totals	19,625	22,603	2,020	44,248	14,689	6,431	575	21,694	34,314	29,034	2,595	65,942
Corporate Center												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	288	72	-	360	237	20	-	257	525	92	-	617
CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION & TECHNOLOGIES	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	141	18	123	282	116	5	35	156	256	24	158	438
ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRONMENTAL	3	1	-	4	3	0	-	3	6	1	-	7
FLEET SERVICES	-	-	-	-	-	-	-	-	-	-	-	-
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	87	37	-	125	72	11	-	82	159	48	-	207
INFORMATION TECHNOLOGY	621	817	-	1,439	511	233	-	743	1,132	1,050	-	2,182
REAL ESTATE & FACILITIES	158	172	-	330	130	49	-	179	288	221	-	509
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	131	459	-	590	108	131	-	238	239	589	-	828
Totals	1,430	1,577	123	3,129	1,175	449	35	1,659	2,605	2,025	158	4,788

SAN DIEGO GAS & ELECTRIC
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
		2019				2019				2019			
Unregulated Affiliates													
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	15	8	-	23	12	2	-	15	28	10	-	38
	CS - FIELD	-	-	-	-	-	-	-	-	-	-	-	-
	CS - INFORMATION & TECHNOLOGIES	-	-	-	-	-	-	-	-	-	-	-	-
	CYBER SECURITY	-	-	-	-	-	-	-	-	-	-	-	-
	ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-
	ENVIRONMENTAL	3	1	-	4	3	0	-	3	6	1	-	7
	FLEET SERVICES	-	-	-	-	-	-	-	-	-	-	-	-
	GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
	HR, DISABILITY, WORKERS COMP & SAFETY	57	17	-	74	47	5	-	51	103	22	-	125
	INFORMATION TECHNOLOGY	24	192	-	216	20	55	-	74	44	246	-	290
	REAL ESTATE & FACILITIES	93	95	-	188	77	27	-	104	170	122	-	292
	RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	13	82	-	95	11	23	-	34	24	106	-	130
Totals		206	395	-	600	169	112	-	281	375	507	-	882
TOTAL ALLOCATIONS OUT		21,260	24,574	2,143	47,977	16,033	6,991	610	23,634	37,294	31,566	2,752	71,612
sdge/ro		21,260	24,574	2,143		16,033	6,991	610					
TOTAL SDG&E Shared Services Forecast		51,936	53,253	3,370	108,559	16,033	6,991	610	23,634	67,969	60,245	3,980	132,193

<u>Overhead Rates</u>	<u>Year</u>	<u>Lab %</u>	<u>Nlab %</u>	<u>NSE %</u>
Bill to SCG	2019	74.85%	28.45%	28.45%
Bill to CorpCtr/Unregulated Affiliates	2019	82.19%	28.45%	28.45%

SAN DIEGO GAS & ELECTRIC
Corporate Center, Business Unit Charge-Up (BUCU)
Test Year 2019 General Rate Case

Corporate Center Reallocation	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
Costs to CorpCtr	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
From SDG&E	2,887	3,047	3,076	3,129	1,729	1,632	1,643	1,659	4,616	4,679	4,719	4,788
From SCG	606	732	784	818	410	461	486	497	1,017	1,193	1,270	1,315
Total Costs supporting CorpCtr	3,493	3,779	3,860	3,947	2,139	2,093	2,129	2,156	5,633	5,872	5,989	6,103

Reallocation Factors	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
SDG&E	31.16%	31.92%	32.35%	32.21%	31.16%	31.92%	32.35%	32.21%				
SCG	33.19%	37.57%	38.30%	38.30%	33.19%	37.57%	38.30%	38.30%				
Unreg Affiliates	35.65%	30.51%	29.35%	29.49%	35.65%	30.51%	29.35%	29.49%				
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%				

	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
Costs allocated back from CorpCtr	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
To SDG&E	1,088	1,206	1,249	1,271	667	668	689	694	1,755	1,874	1,937	1,966
To SCG	1,159	1,420	1,478	1,512	710	786	815	826	1,869	2,206	2,294	2,337
To Unreg Affiliates	1,245	1,153	1,133	1,164	763	639	625	636	2,008	1,791	1,758	1,800
Total Costs returned from CorpCtr	3,493	3,779	3,860	3,947	2,139	2,093	2,129	2,156	5,633	5,872	5,989	6,103

sdge/ro	1,088	1,206	1,249	1,271	667	668	689	694				
scg/ro	1,159	1,420	1,478	1,512	710	786	815	826				

SAN DIEGO GAS & ELECTRIC
Total Net Forecast (with Summary by Functional Area)
Test Year 2019 General Rate Case

	(A)				(B)				(C) = A + B			
	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
TOTAL COMPANY SUMMARY												
RETAINED	56,934	57,770	58,995	60,582	-	-	-	-	56,934	57,770	58,995	60,582
ALLOCATIONS IN												
SCG	12,468	16,703	17,628	19,355	9,964	13,450	14,181	15,618	22,433	30,152	31,809	34,973
BUCU	1,088	1,206	1,249	1,271	667	668	689	694	1,755	1,874	1,937	1,966
TOTAL ALLOCATIONS IN	13,557	17,909	18,877	20,626	10,631	14,118	14,870	16,313	24,188	32,026	33,746	36,939
OVERHEAD CREDIT												
Gross Amount	-	-	-	-	(21,525)	(22,574)	(23,123)	(23,634)	(21,525)	(22,574)	(23,123)	(23,634)
[Less] Payroll Tax & Supplemental Labor	-	-	-	-	1,467	1,524	1,526	1,536	1,467	1,524	1,526	1,536
ADJUSTED OVERHEAD CREDIT	-	-	-	-	(20,059)	(21,049)	(21,596)	(22,098)	(20,059)	(21,049)	(21,596)	(22,098)
				sdge/ro	(20,059)	(21,049)	(21,596)	(22,098)	(20,059)	(21,049)	(21,596)	(22,098)
TOTAL SDG&E SHARED SERVICES FORECAST	70,491	75,679	77,871	81,208	(9,427)	(6,932)	(6,726)	(5,786)	61,063	68,747	71,145	75,423

Retained		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
Functional Area		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	10,075	10,204	10,156	10,186	-	-	-	-	10,075	10,204	10,156	10,186
	CS - FIELD	1	-	-	-	-	-	-	-	1	-	-	-
	CS - INFORMATION & TECHNOLOGIES	250	250	250	250	-	-	-	-	250	250	250	250
	CYBER SECURITY	2,351	2,697	2,794	2,984	-	-	-	-	2,351	2,697	2,794	2,984
	ELECTRIC GENERATION & SONGS	685	1,004	1,004	1,004	-	-	-	-	685	1,004	1,004	1,004
	ENVIRONMENTAL	2,072	1,667	1,766	1,856	-	-	-	-	2,072	1,667	1,766	1,856
	FLEET SERVICES	957	1,012	1,049	1,049	-	-	-	-	957	1,012	1,049	1,049
	GAS SYSTEM INTEGRITY	-	80	80	80	-	-	-	-	-	80	80	80
	HR, DISABILITY, WORKERS COMP & SAFETY	3,823	4,138	4,226	4,253	-	-	-	-	3,823	4,138	4,226	4,253
	INFORMATION TECHNOLOGY	25,955	26,661	26,944	27,505	-	-	-	-	25,955	26,661	26,944	27,505
	REAL ESTATE & FACILITIES	5,260	5,098	5,098	5,098	-	-	-	-	5,260	5,098	5,098	5,098
	RISK MANAGEMENT	2,433	2,784	3,290	3,797	-	-	-	-	2,433	2,784	3,290	3,797
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	3,071	2,175	2,337	2,520	-	-	-	-	3,071	2,175	2,337	2,520
Totals		56,934	57,770	58,995	60,582	-	-	-	-	56,934	57,770	58,995	60,582

SAN DIEGO GAS & ELECTRIC
Total Net Forecast (with Summary by Functional Area)
Test Year 2019 General Rate Case

Allocations In (SCG)		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Functional Area													
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	1,226	1,851	1,997	1,996	1,117	1,575	1,682	1,682	2,343	3,426	3,680	3,678
	CS - FIELD	2,622	2,492	2,484	2,484	2,004	1,906	1,899	1,900	4,625	4,397	4,383	4,384
	CS - INFORMATION & TECHNOLOGIES	339	429	522	585	234	304	375	413	572	733	897	998
	CYBER SECURITY	82	244	244	244	48	148	147	147	130	392	392	392
	ELECTRIC GENERATION & SONGS	-	-	-	-	-	-	-	-	-	-	-	-
	ENVIRONMENTAL	42	32	33	34	26	26	27	28	68	59	60	61
	FLEET SERVICES	1,156	1,196	1,255	1,255	787	793	845	845	1,944	1,990	2,100	2,100
	GAS SYSTEM INTEGRITY	3,101	6,128	6,597	8,258	2,532	5,187	5,582	6,978	5,634	11,315	12,180	15,236
	HR, DISABILITY, WORKERS COMP & SAFETY	140	140	140	140	124	125	124	124	264	265	265	265
	INFORMATION TECHNOLOGY	3,480	3,845	3,967	3,967	2,853	3,122	3,222	3,223	6,333	6,967	7,188	7,189
	REAL ESTATE & FACILITIES	674	738	780	784	227	248	262	264	901	986	1,042	1,047
	RISK MANAGEMENT	146	146	146	146	128	128	128	128	273	273	273	273
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	(540)	(538)	(538)	(538)	(115)	(112)	(112)	(112)	(655)	(650)	(650)	(650)
Totals		12,468	16,703	17,628	19,355	9,964	13,450	14,181	15,618	22,433	30,152	31,809	34,973

Net Shared Services		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Functional Area													
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	11,301	12,055	12,153	12,182	1,117	1,575	1,682	1,682	12,418	13,630	13,835	13,864
	CS - FIELD	2,623	2,492	2,484	2,484	2,004	1,906	1,899	1,900	4,626	4,397	4,383	4,384
	CS - INFORMATION & TECHNOLOGIES	589	679	772	835	234	304	375	413	822	983	1,147	1,248
	CYBER SECURITY	2,433	2,942	3,039	3,228	48	148	147	147	2,481	3,090	3,186	3,376
	ELECTRIC GENERATION & SONGS	685	1,004	1,004	1,004	-	-	-	-	685	1,004	1,004	1,004
	ENVIRONMENTAL	2,114	1,699	1,799	1,890	26	26	27	28	2,140	1,726	1,826	1,917
	FLEET SERVICES	2,114	2,208	2,304	2,304	787	793	845	845	2,901	3,002	3,149	3,149
	GAS SYSTEM INTEGRITY	3,101	6,208	6,678	8,338	2,532	5,187	5,582	6,978	5,634	11,395	12,260	15,316
	HR, DISABILITY, WORKERS COMP & SAFETY	3,964	4,278	4,367	4,394	124	125	124	124	4,088	4,403	4,491	4,518
	INFORMATION TECHNOLOGY	29,435	30,505	30,911	31,472	2,853	3,122	3,222	3,223	32,288	33,627	34,133	34,694
	REAL ESTATE & FACILITIES	5,934	5,836	5,878	5,881	227	248	262	264	6,161	6,084	6,140	6,145
	RISK MANAGEMENT	2,579	2,929	3,436	3,942	128	128	128	128	2,707	3,057	3,563	4,070
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	2,531	1,638	1,799	1,983	(115)	(112)	(112)	(112)	2,416	1,526	1,687	1,870
Totals		69,402	74,473	76,623	79,937	9,964	13,450	14,181	15,618	79,367	87,922	90,804	95,555

Functional Area		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
	BUCU In (CorpCtr Reallocation) to SDGE	1,088	1,206	1,249	1,271	667	668	689	694	1,755	1,874	1,937	1,966

Functional Area		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
	Overhead Credit	-	-	-	-	(20,059)	(21,049)	(21,596)	(22,098)	(20,059)	(21,049)	(21,596)	(22,098)

TOTAL SDG&E Shared Services Forecast		2016	2017	2018	2019
			61,063	68,747	71,145

SOUTHERN CALIFORNIA GAS COMPANY
Shared Services Directs
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Functional Area		2016				2017				2018				2019			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS		4,380	770	-	5,150	5,658	661	-	6,319	5,978	753	-	6,731	5,970	753	-	6,723
CS - FIELD & METER READING		1,050	144	-	1,194	1,384	130	-	1,514	1,384	130	-	1,514	1,384	130	-	1,514
CS - INFORMATION		1,494	809	-	2,303	1,705	1,734	-	3,439	2,236	1,791	-	4,027	2,646	1,844	-	4,490
CS - OFFICE OPERATIONS		4,088	1,308	5	5,401	4,203	1,302	5	5,511	4,203	1,283	5	5,492	4,203	1,283	5	5,492
CS - TECHNOLOGIES, POLICIES & SOLUTIONS		1,866	1,349	-	3,215	1,824	1,491	-	3,315	2,143	1,651	-	3,794	2,143	1,865	-	4,008
CYBER SECURITY		102	137	-	239	332	377	-	708	332	377	-	708	332	377	-	708
ENVIRONMENTAL		309	415	-	724	371	192	-	563	408	192	-	600	444	192	-	636
FLEET & FACILITIES		3,251	2,486	-	5,737	3,196	2,994	-	6,190	3,401	2,944	-	6,345	3,401	2,944	-	6,345
GAS CONTROL & SYSTEM OPERATIONS/PLANNING		4,669	569	-	5,238	4,694	626	-	5,320	5,289	622	-	5,911	5,364	622	-	5,986
GAS DISTRIBUTION		614	75	-	689	230	45	-	275	230	45	-	275	230	45	-	275
GAS ENGINEERING		7,660	1,770	-	9,430	9,213	2,171	-	11,383	9,566	2,187	-	11,753	11,367	3,145	-	14,512
GAS SYSTEM INTEGRITY		6,692	1,503	-	8,195	9,071	2,668	-	11,740	11,065	3,148	-	14,214	13,452	3,854	-	17,307
GAS TRANSMISSION		852	98	-	950	940	75	-	1,015	940	75	-	1,015	940	75	-	1,015
HR, DISABILITY, WORKERS COMP & SAFETY		1,500	160	-	1,660	1,542	162	-	1,704	1,610	169	-	1,779	1,531	169	-	1,700
INFORMATION TECHNOLOGY		8,620	2,006	-	10,626	8,829	2,322	-	11,151	9,479	2,372	-	11,851	9,479	2,372	-	11,851
REAL ESTATE		-	(951)	12,611	11,660	-	-	16,799	16,799	-	19,016	-	19,016	-	-	21,050	21,050
RISK MANAGEMENT		276	16	-	292	276	16	-	292	276	16	-	292	276	16	-	292
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY		433	60	-	493	460	61	-	521	460	61	-	521	460	61	-	521
TIMP & DIMP		1,265	-	-	1,265	2,416	-	-	2,416	2,416	-	-	2,416	3,290	-	-	3,290
UNDERGROUND STORAGE		228	227	-	455	245	188	-	434	245	188	-	434	245	188	-	434
Totals		49,349	12,951	12,616	74,916	56,588	17,216	16,804	90,609	61,660	18,006	19,021	98,688	67,156	19,936	21,055	108,148
		scg/ro	49,349	12,951	12,616	56,588	17,216	16,804	90,609	61,660	18,006	19,021	98,688	67,156	19,936	21,055	108,148

Functional Area		2016				2017				2018				2019			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS		1,247	(7)	-	1,240	1,681	186	-	1,867	1,788	225	-	2,013	1,787	225	-	2,012
CS - FIELD & METER READING		47	7	-	54	-	-	-	-	-	-	-	-	184	130	-	314
CS - INFORMATION		100	55	-	156	118	123	-	242	154	127	-	281	-	-	-	-
CS - OFFICE OPERATIONS		1,919	646	3	2,568	1,868	621	3	2,492	1,868	613	3	2,484	1,868	613	3	2,484
CS - TECHNOLOGIES, POLICIES & SOLUTIONS		109	74	-	183	162	25	-	187	195	46	-	241	195	76	-	271
CYBER SECURITY		39	52	-	91	126	144	-	270	126	144	-	270	126	144	-	270
ENVIRONMENTAL		20	22	-	42	27	5	-	32	28	5	-	33	29	5	-	34
FLEET & FACILITIES		715	491	-	1,206	698	552	-	1,249	756	551	-	1,307	756	551	-	1,307
GAS CONTROL & SYSTEM OPERATIONS/PLANNING		689	69	-	758	687	77	-	765	787	77	-	864	795	77	-	872
GAS DISTRIBUTION		69	4	-	73	33	6	-	40	33	6	-	40	33	6	-	40
GAS ENGINEERING		762	165	-	927	932	188	-	1,121	969	190	-	1,159	1,161	250	-	1,411
GAS SYSTEM INTEGRITY		851	136	-	987	1,165	292	-	1,458	1,464	327	-	1,790	1,854	462	-	2,316
GAS TRANSMISSION		134	17	-	151	123	13	-	136	123	13	-	136	123	13	-	136
HR, DISABILITY, WORKERS COMP & SAFETY		201	23	-	224	201	24	-	224	201	24	-	224	201	24	-	224
INFORMATION TECHNOLOGY		3,204	587	-	3,791	3,469	712	-	4,181	3,611	723	-	4,334	3,611	723	-	4,334
REAL ESTATE		-	(25)	920	895	-	-	1,047	1,047	-	1,128	-	1,128	-	-	1,166	1,166
RISK MANAGEMENT		138	8	-	146	138	8	-	146	138	8	-	146	138	8	-	146
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY		118	(702)	-	(584)	121	(702)	-	(582)	121	(702)	-	(582)	121	(702)	-	(582)
TIMP & DIMP		-	-	-	-	2,416	-	-	2,416	2,416	-	-	2,416	3,290	-	-	3,290
UNDERGROUND STORAGE		106	99	-	205	114	80	-	194	114	80	-	194	114	80	-	194
Totals		10,466	1,723	922	13,112	14,079	2,354	1,050	17,484	14,892	2,455	1,131	18,477	16,386	2,683	1,168	20,238
		scg/ro	10,466	1,723	922	14,079	2,354	1,050	17,484	14,892	2,455	1,131	18,477	16,386	2,683	1,168	20,238

SOUTHERN CALIFORNIA GAS COMPANY
Shared Services Directs
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Retained		2016				2017				2018				2019			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
Functional Area	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	3,133	777	-	3,910	3,977	475	-	4,452	4,189	528	-	4,718	4,183	528	-	4,711
	CS - FIELD & METER READING	1,003	137	-	1,140	1,384	130	-	1,514	1,384	130	-	1,514	1,384	130	-	1,514
	CS - INFORMATION	1,394	754	-	2,147	1,586	1,611	-	3,197	2,081	1,665	-	3,746	2,462	1,714	-	4,176
	CS - OFFICE OPERATIONS	2,169	662	3	2,833	2,335	681	3	3,019	2,335	670	3	3,008	2,335	670	3	3,008
	CS - TECHNOLOGIES, POLICIES & SOLUTIONS	1,757	1,275	-	3,032	1,662	1,466	-	3,128	1,947	1,605	-	3,553	1,947	1,789	-	3,736
	CYBER SECURITY	63	85	-	148	205	233	-	438	205	233	-	438	205	233	-	438
	ENVIRONMENTAL	289	393	-	682	344	187	-	531	380	187	-	567	415	187	-	602
	FLEET & FACILITIES	2,536	1,995	-	4,531	2,498	2,442	-	4,940	2,644	2,393	-	5,037	2,644	2,393	-	5,037
	GAS CONTROL & SYSTEM OPERATIONS/PLANNING	3,980	500	-	4,480	4,007	549	-	4,556	4,502	545	-	5,048	4,569	545	-	5,114
	GAS DISTRIBUTION	545	71	-	616	197	39	-	235	197	39	-	235	197	39	-	235
	GAS ENGINEERING	6,898	1,605	-	8,503	8,280	1,982	-	10,263	8,597	1,997	-	10,594	10,205	2,895	-	13,101
	GAS SYSTEM INTEGRITY	5,841	1,367	-	7,208	7,906	2,376	-	10,282	9,602	2,822	-	12,423	11,598	3,392	-	14,990
	GAS TRANSMISSION	718	81	-	799	818	62	-	879	818	62	-	879	818	62	-	879
	HR, DISABILITY, WORKERS COMP & SAFETY	1,299	137	-	1,436	1,341	139	-	1,480	1,409	146	-	1,555	1,330	146	-	1,476
	INFORMATION TECHNOLOGY	5,416	1,419	-	6,835	5,360	1,609	-	6,969	5,868	1,648	-	7,516	5,868	1,648	-	7,516
	REAL ESTATE	-	(926)	11,691	10,765	-	-	15,752	15,752	-	-	17,888	-	-	-	19,884	19,884
	RISK MANAGEMENT	138	9	-	147	138	9	-	147	138	9	-	147	138	9	-	147
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	315	762	-	1,077	339	763	-	1,102	339	763	-	1,102	339	763	-	1,102
	TIMP & DIMP	1,265	-	-	1,265	-	-	-	-	-	-	-	-	-	-	-	-
	UNDERGROUND STORAGE	123	128	-	251	131	109	-	240	131	109	-	240	131	109	-	240
Totals		38,883	11,228	11,694	61,804	42,509	14,862	15,754	73,125	46,769	15,551	17,891	80,210	50,770	17,253	19,887	87,910
	scg/ro	38,883	11,228	11,694		42,509	14,862	15,754		46,769	15,551	17,891		50,770	17,253	19,887	

Allocations In		2016				2017				2018				2019			
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
Functional Area	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	2,512	349	-	2,861	2,900	414	-	3,314	2,900	389	-	3,290	2,900	387	-	3,287
	CS - FIELD & METER READING	-	(1)	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-
	CS - INFORMATION	126	28	-	154	154	30	-	184	154	30	-	184	154	30	-	184
	CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CYBER SECURITY	2,111	269	1,602	3,982	2,248	304	1,618	4,170	2,318	304	1,708	4,330	2,318	304	2,020	4,641
	ENVIRONMENTAL	352	73	-	425	189	54	-	243	189	54	-	243	189	54	-	243
	FLEET & FACILITIES	255	143	-	399	415	112	-	527	454	114	-	568	454	114	-	568
	GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GAS ENGINEERING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	GAS SYSTEM INTEGRITY	-	-	-	-	-	520	-	520	-	520	-	520	-	520	-	520
	GASTRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	HR, DISABILITY, WORKERS COMP & SAFETY	117	5	-	123	118	32	-	150	118	34	-	152	118	37	-	154
	INFORMATION TECHNOLOGY	10,742	17,123	-	27,865	11,041	17,225	-	28,266	11,041	17,851	-	28,892	11,041	18,508	-	29,549
	REAL ESTATE	79	565	-	643	94	578	-	671	94	578	-	671	94	578	-	671
	RISK MANAGEMENT	803	1,044	-	1,848	922	1,237	-	2,159	1,033	1,520	-	2,553	1,144	1,803	-	2,947
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	857	99	-	956	1,053	84	-	1,137	1,214	84	-	1,299	1,214	268	-	1,482
	TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals		17,956	19,697	1,602	39,255	19,133	20,590	1,618	41,342	19,514	21,479	1,708	42,701	19,625	22,603	2,020	44,248
	scg/ro	17,956	19,697	1,602		19,133	20,590	1,618		19,514	21,479	1,708		19,625	22,603	2,020	

SOUTHERN CALIFORNIA GAS COMPANY
Shared Services Directs
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Functional Area		2016				2017				2018				2019				
		L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total	
Total Net Shared Services (Directs)																		
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	5,645	1,126	-	6,771	6,877	889	-	7,766	7,089	918	-	8,007	7,083	916	-	7,998	
	CS - FIELD & METER READING	1,003	136	-	1,139	1,384	130	-	1,514	1,384	130	-	1,514	1,384	130	-	1,514	
	CS - INFORMATION	1,520	782	-	2,302	1,740	1,641	-	3,381	2,235	1,695	-	3,930	2,615	1,744	-	4,360	
	CS - OFFICE OPERATIONS	2,169	662	3	2,833	2,335	681	3	3,019	2,335	670	3	3,008	2,335	670	3	3,008	
	CS - TECHNOLOGIES, POLICIES & SOLUTIONS	1,757	1,275	-	3,032	1,662	1,466	-	3,128	1,947	1,605	-	3,553	1,947	1,789	-	3,736	
	CYBER SECURITY	2,174	354	1,602	4,130	2,453	537	1,618	4,609	2,523	537	1,708	4,768	2,523	537	2,020	5,080	
	ENVIRONMENTAL	642	466	-	1,107	533	241	-	774	569	241	-	810	604	241	-	845	
	FLEET & FACILITIES	2,791	2,138	-	4,930	2,913	2,555	-	5,468	3,099	2,507	-	5,605	3,099	2,507	-	5,605	
	GAS CONTROL & SYSTEM OPERATIONS/PLANNING	3,980	500	-	4,480	4,007	549	-	4,556	4,502	545	-	5,048	4,569	545	-	5,114	
	GAS DISTRIBUTION	545	71	-	616	197	39	-	235	197	39	-	235	197	39	-	235	
	GAS ENGINEERING	6,898	1,605	-	8,503	8,280	1,982	-	10,263	8,597	1,997	-	10,594	10,205	2,895	-	13,101	
	GAS SYSTEM INTEGRITY	5,841	1,367	-	7,208	7,906	2,896	-	10,802	9,602	3,342	-	12,943	11,598	3,912	-	15,510	
	GAS TRANSMISSION	718	81	-	799	818	62	-	879	818	62	-	879	818	62	-	879	
	HR, DISABILITY, WORKERS COMP & SAFETY	1,417	142	-	1,559	1,459	171	-	1,630	1,527	180	-	1,707	1,448	183	-	1,630	
	INFORMATION TECHNOLOGY	16,158	18,542	-	34,700	16,401	18,834	-	35,235	16,909	19,500	-	36,409	16,909	20,157	-	37,066	
	REAL ESTATE	79	(362)	11,691	11,408	94	578	15,752	16,423	94	578	17,888	18,559	94	578	19,884	20,556	
	RISK MANAGEMENT	941	1,053	-	1,994	1,060	1,246	-	2,306	1,171	1,529	-	2,700	1,282	1,812	-	3,094	
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1,172	861	-	2,033	1,392	848	-	2,239	1,553	848	-	2,401	1,553	1,031	-	2,584	
	TIMP&DIMP	1,265	-	-	1,265	-	-	-	-	-	-	-	-	-	-	-	-	
	UNDERGROUND STORAGE	123	128	-	251	131	109	-	240	131	109	-	240	131	109	-	240	
Totals		56,839	30,925	13,295	101,059	61,641	35,452	17,373	114,467	66,282	37,030	19,599	122,911	70,395	39,856	21,907	132,158	

SOUTHERN CALIFORNIA GAS COMPANY
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

YEAR 2016	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2016				2016				2016			
	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
TOTAL RETAINED AMOUNT	38,883	11,228	11,694	61,804	-	-	-	-	38,883	11,228	11,694	61,804
Allocations Out												
SDG&E												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	1,235	(9)	-	1,226	1,120	(3)	-	1,117	2,355	(12)	-	2,343
CS - FIELD & METER READING	47	7	-	54	42	2	-	45	89	9	-	98
CS - INFORMATION	100	55	-	156	91	19	-	110	191	74	-	265
CS - OFFICE OPERATIONS	1,919	646	3	2,568	1,741	217	1	1,959	3,660	864	3	4,527
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	109	74	-	183	99	25	-	124	208	99	-	307
CYBER SECURITY	35	47	-	82	32	16	-	48	67	63	-	130
ENVIRONMENTAL	20	22	-	42	18	7	-	26	38	30	-	68
FLEET & FACILITIES	698	458	-	1,156	633	154	-	787	1,332	612	-	1,944
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	689	69	-	758	625	23	-	648	1,314	92	-	1,407
GAS DISTRIBUTION	69	4	-	73	63	1	-	64	131	6	-	137
GAS ENGINEERING	762	165	-	927	691	56	-	746	1,452	221	-	1,674
GAS SYSTEM INTEGRITY	851	136	-	987	772	46	-	817	1,622	182	-	1,805
GAS TRANSMISSION	134	17	-	151	121	6	-	127	255	23	-	278
HR, DISABILITY, WORKERS COMP & SAFETY	135	5	-	140	123	2	-	124	258	7	-	264
INFORMATION TECHNOLOGY	2,948	532	-	3,480	2,674	179	-	2,853	5,622	711	-	6,333
REAL ESTATE	-	(9)	682	674	-	(3)	230	227	-	(11)	912	901
RISK MANAGEMENT	138	8	-	146	125	3	-	128	263	10	-	273
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	117	(658)	-	(540)	107	(221)	-	(115)	224	(879)	-	(655)
TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
UNDERGROUND STORAGE	106	99	-	205	96	33	-	129	201	132	-	333
Totals	10,113	1,671	685	12,468	9,172	562	230	9,964	19,285	2,233	915	22,433
Corporate Center												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	4	1	-	4	4	0	-	4	8	1	-	8
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	-	-	-	-	-	-	-	-	-	-	-	-
CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	4	5	-	9	4	2	-	5	7	7	-	14
ENVIRONMENTAL	-	-	-	-	-	-	-	-	-	-	-	-
FLEET & FACILITIES	16	33	-	50	16	11	-	27	33	44	-	77
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-
GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-
GAS ENGINEERING	-	-	-	-	-	-	-	-	-	-	-	-
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
GAS TRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	60	18	-	78	59	6	-	65	119	25	-	144
INFORMATION TECHNOLOGY	233	55	-	288	230	18	-	248	463	73	-	537
REAL ESTATE	-	(16)	238	221	-	(5)	80	74	-	(22)	317	296
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	0	(45)	-	(44)	0	(15)	-	(15)	1	(60)	-	(59)
TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-
Totals	318	51	238	606	313	17	80	410	632	68	317	1,017

SOUTHERN CALIFORNIA GAS COMPANY
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2016				2016				2016			
Unregulated Affiliates												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	8	1	-	9	8	0	-	8	15	2	-	17
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	-	-	-	-	-	-	-	-	-	-	-	-
CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRONMENTAL	-	-	-	-	-	-	-	-	-	-	-	-
FLEET & FACILITIES	-	-	-	-	-	-	-	-	-	-	-	-
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-
GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-
GAS ENGINEERING	-	-	-	-	-	-	-	-	-	-	-	-
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
GAS TRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	5	0	-	5	5	0	-	5	10	0	-	11
INFORMATION TECHNOLOGY	23	0	-	23	22	0	-	22	45	0	-	45
REAL ESTATE	-	-	-	-	-	-	-	-	-	-	-	-
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	-	-	-	-	-	-	-	-	-	-	-	-
TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-
Totals	35	2	-	37	35	1	-	36	70	2	-	73
TOTAL ALLOCATIONS OUT	10,466	1,723	922	13,112	9,521	580	310	10,410	19,987	2,303	1,233	23,522
scg/ro	10,466	1,723	922		9,521	580	310					
TOTAL SDG&E Shared Services Forecast	49,349	12,951	12,616	74,916	9,521	580	310	10,410	58,870	13,531	12,926	85,326

<u>Overhead Rates</u>	<u>Year</u>	<u>Lab %</u>	<u>Nlab %</u>	<u>NSE %</u>
Bill to SDG&E	2016	90.70%	33.63%	33.63%
Bill to CorpCtr/Unregulated Affiliates	2016	98.58%	33.63%	33.63%

SOUTHERN CALIFORNIA GAS COMPANY
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

YEAR 2017	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2017				2017				2017			
	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
TOTAL RETAINED AMOUNT	42,509	14,862	15,754	73,125	-	-	-	-	42,509	14,862	15,754	73,125
Allocations Out												
SDG&E												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	1,666	185	-	1,851	1,512	62	-	1,575	3,179	247	-	3,426
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	118	123	-	242	108	41	-	149	226	165	-	391
CS - OFFICE OPERATIONS	1,868	621	3	2,492	1,696	209	1	1,906	3,564	830	4	4,397
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	162	25	-	187	147	8	-	155	309	33	-	342
CYBER SECURITY	114	130	-	244	104	44	-	148	218	174	-	392
ENVIRONMENTAL	27	5	-	32	25	2	-	26	52	7	-	59
FLEET & FACILITIES	684	512	-	1,196	621	172	-	793	1,306	684	-	1,990
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	687	77	-	765	624	26	-	650	1,311	103	-	1,414
GAS DISTRIBUTION	33	6	-	40	30	2	-	32	63	9	-	72
GAS ENGINEERING	933	188	-	1,120	847	63	-	910	1,779	251	-	2,030
GAS SYSTEM INTEGRITY	1,165	292	-	1,458	1,058	98	-	1,156	2,223	391	-	2,614
GAS TRANSMISSION	123	13	-	136	111	4	-	116	234	18	-	252
HR, DISABILITY, WORKERS COMP & SAFETY	135	5	-	140	123	2	-	125	258	7	-	265
INFORMATION TECHNOLOGY	3,200	644	-	3,845	2,905	217	-	3,122	6,105	861	-	6,967
REAL ESTATE	-	-	738	738	-	-	248	248	-	-	986	986
RISK MANAGEMENT	138	8	-	146	125	3	-	128	263	10	-	273
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	120	(658)	-	(538)	109	(221)	-	(112)	229	(879)	-	(650)
TIMP & DIMP	2,416	-	-	2,416	2,193	-	-	2,193	4,609	-	-	4,609
UNDERGROUND STORAGE	114	80	-	194	103	27	-	130	217	107	-	324
Totals	13,705	2,257	741	16,703	12,441	759	249	13,450	26,146	3,016	990	30,152
Corporate Center												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	4	0	-	5	4	0	-	4	9	1	-	9
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	-	-	-	-	-	-	-	-	-	-	-	-
CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	12	14	-	25	12	5	-	16	24	18	-	42
ENVIRONMENTAL	-	-	-	-	-	-	-	-	-	-	-	-
FLEET & FACILITIES	13	40	-	53	13	13	-	26	26	53	-	80
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-
GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-
GAS ENGINEERING	-	1	-	1	-	0	-	0	-	1	-	1
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
GAS TRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	60	18	-	79	59	6	-	66	120	24	-	144
INFORMATION TECHNOLOGY	240	64	-	304	237	22	-	258	476	86	-	562
REAL ESTATE	-	-	309	309	-	-	104	104	-	-	414	414
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1	(45)	-	(44)	1	(15)	-	(15)	1	(60)	-	(59)
TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-
Totals	330	92	309	732	326	31	104	461	655	124	414	1,193

SOUTHERN CALIFORNIA GAS COMPANY
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2017				2017				2017			
Unregulated Affiliates												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	10	1	-	11	10	0	-	10	20	1	-	22
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	-	-	-	-	-	-	-	-	-	-	-	-
CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRONMENTAL	-	-	-	-	-	-	-	-	-	-	-	-
FLEET & FACILITIES	-	-	-	-	-	-	-	-	-	-	-	-
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-
GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-
GAS ENGINEERING	(0)	-	-	(0)	(0)	-	-	(0)	(0)	-	-	(0)
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
GAS TRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	5	0	-	5	5	0	-	5	10	0	-	11
INFORMATION TECHNOLOGY	29	4	-	33	29	1	-	30	57	5	-	62
REAL ESTATE	-	-	-	-	-	-	-	-	-	-	-	-
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	-	-	-	-	-	-	-	-	-	-	-	-
TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-
Totals	44	5	-	49	44	2	-	45	88	6	-	94
TOTAL ALLOCATIONS OUT	14,079	2,354	1,050	17,484	12,811	792	353	13,955	26,890	3,146	1,403	31,439
scg/ro	14,079	2,354	1,050		12,811	792	353					
TOTAL SDG&E Shared Services Forecast	56,588	17,216	16,804	90,609	12,811	792	353	13,955	69,399	18,008	17,158	104,564

<u>Overhead Rates</u>	<u>Year</u>	<u>Lab %</u>	<u>Nlab %</u>	<u>NSE %</u>
Bill to SDG&E	2017	90.78%	33.63%	33.63%
Bill to CorpCtr/Unregulated Affiliates	2017	98.66%	33.63%	33.63%

SOUTHERN CALIFORNIA GAS COMPANY
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

YEAR 2018	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2018				2018				2018			
	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
TOTAL RETAINED AMOUNT	46,769	15,551	17,891	80,210	-	-	-	-	46,769	15,551	17,891	80,210
Allocations Out												
SDG&E												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	1,774	223	-	1,997	1,607	75	-	1,682	3,381	299	-	3,680
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	154	127	-	281	140	43	-	182	294	169	-	463
CS - OFFICE OPERATIONS	1,868	613	3	2,484	1,692	206	1	1,899	3,560	819	4	4,383
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	195	46	-	241	177	15	-	192	373	61	-	434
CYBER SECURITY	114	130	-	244	104	44	-	147	218	174	-	392
ENVIRONMENTAL	28	5	-	33	25	2	-	27	53	7	-	60
FLEET & FACILITIES	743	512	-	1,255	673	172	-	845	1,416	684	-	2,100
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	787	77	-	864	713	26	-	739	1,499	103	-	1,602
GAS DISTRIBUTION	33	6	-	40	30	2	-	32	63	9	-	72
GAS ENGINEERING	969	190	-	1,159	878	64	-	942	1,847	253	-	2,100
GAS SYSTEM INTEGRITY	1,464	327	-	1,790	1,326	110	-	1,436	2,789	436	-	3,226
GAS TRANSMISSION	123	13	-	136	111	4	-	115	234	18	-	251
HR, DISABILITY, WORKERS COMP & SAFETY	135	5	-	140	123	2	-	124	258	7	-	265
INFORMATION TECHNOLOGY	3,314	653	-	3,967	3,002	220	-	3,222	6,316	873	-	7,188
REAL ESTATE	-	-	780	780	-	-	262	262	-	-	1,042	1,042
RISK MANAGEMENT	138	8	-	146	125	3	-	128	263	10	-	273
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	120	(658)	-	(538)	109	(221)	-	(112)	229	(879)	-	(650)
TIMP & DIMP	2,416	-	-	2,416	2,189	-	-	2,189	4,605	-	-	4,605
UNDERGROUND STORAGE	114	80	-	194	103	27	-	130	217	107	-	324
Totals	14,489	2,356	783	17,628	13,126	792	263	14,181	27,615	3,148	1,046	31,809
Corporate Center												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	4	0	-	5	4	0	-	4	9	1	-	9
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	-	-	-	-	-	-	-	-	-	-	-	-
CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	12	14	-	25	12	5	-	16	24	18	-	42
ENVIRONMENTAL	-	-	-	-	-	-	-	-	-	-	-	-
FLEET & FACILITIES	13	40	-	53	13	13	-	26	26	53	-	79
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-
GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-
GAS ENGINEERING	-	1	-	1	-	0	-	0	-	1	-	1
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
GAS TRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	60	18	-	79	59	6	-	65	119	24	-	144
INFORMATION TECHNOLOGY	253	65	-	318	249	22	-	271	501	87	-	589
REAL ESTATE	-	-	348	348	-	-	117	117	-	-	465	465
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1	(45)	-	(44)	1	(15)	-	(15)	1	(60)	-	(59)
TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-
Totals	343	93	348	784	338	31	117	486	680	124	465	1,270

SOUTHERN CALIFORNIA GAS COMPANY
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2018				2018				2018			
Unregulated Affiliates												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	10	1	-	11	10	0	-	10	20	1	-	21
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	-	-	-	-	-	-	-	-	-	-	-	-
CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRONMENTAL	-	-	-	-	-	-	-	-	-	-	-	-
FLEET & FACILITIES	-	-	-	-	-	-	-	-	-	-	-	-
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-
GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-
GAS ENGINEERING	(0)	-	-	(0)	(0)	-	-	(0)	(0)	-	-	(0)
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
GAS TRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	5	0	-	5	5	0	-	5	10	0	-	11
INFORMATION TECHNOLOGY	44	5	-	49	44	2	-	45	88	6	-	94
REAL ESTATE	-	-	-	-	-	-	-	-	-	-	-	-
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	-	-	-	-	-	-	-	-	-	-	-	-
TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-
Totals	60	6	-	65	59	2	-	61	118	8	-	126
TOTAL ALLOCATIONS OUT	14,892	2,455	1,131	18,477	13,522	825	380	14,728	28,414	3,280	1,511	33,205
scg/ro	14,892	2,455	1,131		13,522	825	380					
TOTAL SDG&E Shared Services Forecast	61,660	18,006	19,021	98,688	13,522	825	380	14,728	75,182	18,831	19,401	113,415

<u>Overhead Rates</u>	<u>Year</u>	<u>Lab %</u>	<u>Nlab %</u>	<u>NSE %</u>
Bill to SDG&E	2018	90.59%	33.62%	33.62%
Bill to CorpCtr/Unregulated Affiliates	2018	98.46%	33.62%	33.62%

SOUTHERN CALIFORNIA GAS COMPANY
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

YEAR 2019	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2019				2019				2019			
	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
TOTAL RETAINED AMOUNT	50,770	17,253	19,887	87,910	-	-	-	-	50,770	17,253	19,887	87,910
Allocations Out												
SDG&E												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	1,773	223	-	1,996	1,607	75	-	1,682	3,379	299	-	3,678
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	184	130	-	314	167	44	-	210	351	173	-	524
CS - OFFICE OPERATIONS	1,868	613	3	2,484	1,693	206	1	1,900	3,561	819	4	4,384
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	195	76	-	271	177	26	-	203	373	101	-	474
CYBER SECURITY	114	130	-	244	104	44	-	147	218	174	-	392
ENVIRONMENTAL	29	5	-	34	26	2	-	28	55	7	-	61
FLEET & FACILITIES	743	512	-	1,255	673	172	-	845	1,416	684	-	2,100
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	795	77	-	872	720	26	-	746	1,516	103	-	1,618
GAS DISTRIBUTION	33	6	-	40	30	2	-	32	63	9	-	72
GAS ENGINEERING	1,162	249	-	1,411	1,053	84	-	1,136	2,214	333	-	2,547
GAS SYSTEM INTEGRITY	1,854	462	-	2,316	1,680	155	-	1,836	3,534	618	-	4,152
GAS TRANSMISSION	123	13	-	136	111	4	-	116	234	18	-	251
HR, DISABILITY, WORKERS COMP & SAFETY	135	5	-	140	123	2	-	124	258	7	-	265
INFORMATION TECHNOLOGY	3,314	653	-	3,967	3,003	220	-	3,223	6,317	873	-	7,189
REAL ESTATE	-	-	784	784	-	-	264	264	-	-	1,047	1,047
RISK MANAGEMENT	138	8	-	146	125	3	-	128	263	10	-	273
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	120	(658)	-	(538)	109	(221)	-	(112)	229	(879)	-	(650)
TIMP & DIMP	3,290	-	-	3,290	2,981	-	-	2,981	6,271	-	-	6,271
UNDERGROUND STORAGE	114	80	-	194	103	27	-	130	217	107	-	324
Totals	15,984	2,584	786	19,355	14,485	869	264	15,618	30,469	3,454	1,051	34,973
Corporate Center												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	4	0	-	5	4	0	-	4	9	1	-	9
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	-	-	-	-	-	-	-	-	-	-	-	-
CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	12	14	-	25	12	5	-	16	24	18	-	42
ENVIRONMENTAL	-	-	-	-	-	-	-	-	-	-	-	-
FLEET & FACILITIES	13	40	-	53	13	13	-	26	26	53	-	79
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-
GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-
GAS ENGINEERING	-	1	-	1	-	0	-	0	-	1	-	1
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
GAS TRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	60	18	-	79	59	6	-	65	120	24	-	144
INFORMATION TECHNOLOGY	253	65	-	318	249	22	-	271	501	87	-	589
REAL ESTATE	-	-	382	382	-	-	128	128	-	-	511	511
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1	(45)	-	(44)	1	(15)	-	(15)	1	(60)	-	(59)
TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-
Totals	343	93	382	818	338	31	128	497	680	124	511	1,315

SOUTHERN CALIFORNIA GAS COMPANY
Billed Out, Plus Overheads
Test Year 2019 General Rate Case

	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2019				2019				2019			
Unregulated Affiliates												
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	10	1	-	11	10	0	-	10	20	1	-	21
CS - FIELD & METER READING	-	-	-	-	-	-	-	-	-	-	-	-
CS - INFORMATION	-	-	-	-	-	-	-	-	-	-	-	-
CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
CYBER SECURITY	-	-	-	-	-	-	-	-	-	-	-	-
ENVIRONMENTAL	-	-	-	-	-	-	-	-	-	-	-	-
FLEET & FACILITIES	-	-	-	-	-	-	-	-	-	-	-	-
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-
GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-
GAS ENGINEERING	(0)	-	-	(0)	(0)	-	-	(0)	(1)	-	-	(1)
GAS SYSTEM INTEGRITY	-	-	-	-	-	-	-	-	-	-	-	-
GAS TRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-
HR, DISABILITY, WORKERS COMP & SAFETY	5	0	-	5	5	0	-	5	10	0	-	11
INFORMATION TECHNOLOGY	44	5	-	49	44	2	-	45	88	6	-	95
REAL ESTATE	-	-	-	-	-	-	-	-	-	-	-	-
RISK MANAGEMENT	-	-	-	-	-	-	-	-	-	-	-	-
SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	-	-	-	-	-	-	-	-	-	-	-	-
TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-
Totals	59	6	-	65	58	2	-	60	118	8	-	126
TOTAL ALLOCATIONS OUT	16,386	2,683	1,168	20,238	14,881	902	393	16,176	31,267	3,586	1,561	36,414
scg/ro	16,386	2,683	1,168		14,881	902	393					
TOTAL SDG&E Shared Services Forecast	67,156	19,936	21,055	108,148	14,881	902	393	16,176	82,037	20,839	21,448	124,324

<u>Overhead Rates</u>	<u>Year</u>	<u>Lab %</u>	<u>Nlab %</u>	<u>NSE %</u>
Bill to SDG&E	2019	90.62%	33.63%	33.63%
Bill to CorpCtr/Unregulated Affiliates	2019	98.49%	33.63%	33.63%

SOUTHERN CALIFORNIA GAS COMPANY
Corporate Center, Business Unit Charge-Up (BUCU)
Test Year 2019 General Rate Case

Corporate Center Reallocation	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
Costs to CorpCtr	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
From SCG	606	732	784	818	410	461	486	497	1,017	1,193	1,270	1,315
From SDG&E	2,887	3,047	3,076	3,129	1,729	1,632	1,643	1,659	4,616	4,679	4,719	4,788
Total Costs supporting CorpCtr	3,493	3,779	3,860	3,947	2,139	2,093	2,129	2,156	5,633	5,872	5,989	6,103

Reallocation Factors	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
SCG	33.19%	37.57%	38.30%	38.30%	33.19%	37.57%	38.30%	38.30%				
SDG&E	31.16%	31.92%	32.35%	32.21%	31.16%	31.92%	32.35%	32.21%				
Unreg Affiliates	35.65%	30.51%	29.35%	29.49%	35.65%	30.51%	29.35%	29.49%				
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%				

	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
Costs allocated back from CorpCtr	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
To SCG	1,159	1,420	1,478	1,512	710	786	815	826	1,869	2,206	2,294	2,337
To SDG&E	1,088	1,206	1,249	1,271	667	668	689	694	1,755	1,874	1,937	1,966
To Unreg Affiliates	1,245	1,153	1,133	1,164	763	639	625	636	2,008	1,791	1,758	1,800
Total Costs returned from CorpCtr	3,493	3,779	3,860	3,947	2,139	2,093	2,129	2,156	5,633	5,872	5,989	6,103
scg/ro	1,159	1,420	1,478	1,512	710	786	815	826				
sdge/ro	1,088	1,206	1,249	1,271	667	668	689	694				

San Diego Gas & Electric Company/SoCalGas
2019 GRC - APP
SOUTHERN CALIFORNIA GAS COMPANY
Total Net Forecast (with Summary by Functional Area)
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	(A)				(B)				(C) = A + B			
	Direct Costs				Overheads				(SUM) Fully Loaded Costs			
	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
TOTAL COMPANY SUMMARY												
RETAINED	61,804	73,125	80,210	87,910	-	-	-	-	61,804	73,125	80,210	87,910
ALLOCATIONS IN												
SDG&E	39,255	41,342	42,701	44,248	19,503	20,668	21,201	21,694	58,758	62,010	63,902	65,942
BUCU	1,159	1,420	1,478	1,512	710	786	815	826	1,869	2,206	2,294	2,337
TOTAL ALLOCATIONS IN	40,414	42,761	44,179	45,759	20,213	21,454	22,016	22,520	60,627	64,216	66,196	68,279
OVERHEAD CREDIT												
Gross Amount	-	-	-	-	(10,410)	(13,955)	(14,728)	(16,176)	(10,410)	(13,955)	(14,728)	(16,176)
[Less] Payroll Tax & Supplemental Labor	-	-	-	-	814	1,097	1,138	1,251	814	1,097	1,138	1,251
ADJUSTED OVERHEAD CREDIT	-	-	-	-	(9,597)	(12,859)	(13,589)	(14,925)	(9,597)	(12,859)	(13,589)	(14,925)
					scg/ro	(9,597)	(12,859)	(13,589)	(14,925)			
TOTAL SCG SHARED SERVICES FORECAST	102,218	115,886	124,390	133,669	10,617	8,596	8,427	7,595	112,835	124,482	132,817	141,264

Functional Area		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
Retained													
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	3,910	4,452	4,718	4,711	-	-	-	-	3,910	4,452	4,718	4,711
	CS - FIELD & METER READING	1,140	1,514	1,514	1,514	-	-	-	-	1,140	1,514	1,514	1,514
	CS - INFORMATION	2,147	3,197	3,746	4,176	-	-	-	-	2,147	3,197	3,746	4,176
	CS - OFFICE OPERATIONS	2,833	3,019	3,008	3,008	-	-	-	-	2,833	3,019	3,008	3,008
	CS - TECHNOLOGIES, POLICIES & SOLUTIONS	3,032	3,128	3,553	3,736	-	-	-	-	3,032	3,128	3,553	3,736
	CYBER SECURITY	148	438	438	438	-	-	-	-	148	438	438	438
	ENVIRONMENTAL	682	531	567	602	-	-	-	-	682	531	567	602
	FLEET & FACILITIES	4,531	4,940	5,037	5,037	-	-	-	-	4,531	4,940	5,037	5,037
	GAS CONTROL & SYSTEM OPERATIONS/PLANNING	4,480	4,556	5,048	5,114	-	-	-	-	4,480	4,556	5,048	5,114
	GAS DISTRIBUTION	616	235	235	235	-	-	-	-	616	235	235	235
	GAS ENGINEERING	8,503	10,263	10,594	13,101	-	-	-	-	8,503	10,263	10,594	13,101
	GAS SYSTEM INTEGRITY	7,208	10,282	12,423	14,990	-	-	-	-	7,208	10,282	12,423	14,990
	GAS TRANSMISSION	799	879	879	879	-	-	-	-	799	879	879	879
	HR, DISABILITY, WORKERS COMP & SAFETY	1,436	1,480	1,555	1,476	-	-	-	-	1,436	1,480	1,555	1,476
	INFORMATION TECHNOLOGY	6,835	6,969	7,516	7,516	-	-	-	-	6,835	6,969	7,516	7,516
	REAL ESTATE	10,765	15,752	17,888	19,884	-	-	-	-	10,765	15,752	17,888	19,884
	RISK MANAGEMENT	147	147	147	147	-	-	-	-	147	147	147	147
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	1,077	1,102	1,102	1,102	-	-	-	-	1,077	1,102	1,102	1,102
	TIMP & DIMP	1,265	-	-	-	-	-	-	-	1,265	-	-	-
	UNDERGROUND STORAGE	251	240	240	240	-	-	-	-	251	240	240	240
Totals		61,804	73,125	80,210	87,910	-	-	-	-	61,804	73,125	80,210	87,910

San Diego Gas & Electric Company/SoCalGas
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SOUTHERN CALIFORNIA GAS COMPANY
Total Net Forecast (with Summary by Functional Area)
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Allocations In (SDG&E)		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
Functional Area		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	2,861	3,314	3,290	3,287	1,980	2,293	2,281	2,281	4,841	5,607	5,571	5,568
	CS - FIELD & METER READING	(1)	-	-	-	(0)	-	-	-	(1)	-	-	-
	CS - INFORMATION	154	184	184	184	102	124	124	124	257	308	308	308
	CS - OFFICE OPERATIONS	-	-	-	-	-	-	-	-	-	-	-	-
	CS - TECHNOLOGIES, POLICIES & SOLUTIONS	-	-	-	-	-	-	-	-	-	-	-	-
	CYBER SECURITY	3,982	4,170	4,330	4,641	2,113	2,233	2,307	2,396	6,095	6,403	6,637	7,037
	ENVIRONMENTAL	425	243	243	243	285	157	157	157	710	400	400	400
	FLEET & FACILITIES	399	527	568	568	232	343	372	372	631	870	940	940
	GAS CONTROL & SYSTEM OPERATIONS/PLANNING	-	-	-	-	-	-	-	-	-	-	-	-
	GAS DISTRIBUTION	-	-	-	-	-	-	-	-	-	-	-	-
	GAS ENGINEERING	-	-	-	-	-	-	-	-	-	-	-	-
	GAS SYSTEM INTEGRITY	-	520	520	520	-	148	148	148	-	668	668	668
	GAS TRANSMISSION	-	-	-	-	-	-	-	-	-	-	-	-
	HR, DISABILITY, WORKERS COMP & SAFETY	123	150	152	154	89	97	98	98	212	247	250	253
	INFORMATION TECHNOLOGY	27,865	28,266	28,892	29,549	12,914	13,182	13,342	13,530	40,779	41,448	42,234	43,079
	REAL ESTATE	643	671	671	671	219	235	234	234	863	906	906	906
	RISK MANAGEMENT	1,848	2,159	2,553	2,947	899	1,043	1,205	1,369	2,746	3,202	3,758	4,316
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	956	1,137	1,299	1,482	670	814	933	985	1,626	1,951	2,231	2,467
	TIMP & DIMP	-	-	-	-	-	-	-	-	-	-	-	-
	UNDERGROUND STORAGE	-	-	-	-	-	-	-	-	-	-	-	-
Totals		39,255	41,342	42,701	44,248	19,503	20,668	21,201	21,694	58,758	62,010	63,902	65,942

Net Shared Services		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
Functional Area		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
	ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	6,771	7,766	8,007	7,998	1,980	2,293	2,281	2,281	8,751	10,059	10,288	10,279
	CS - FIELD & METER READING	1,139	1,514	1,514	1,514	(0)	-	-	-	1,139	1,514	1,514	1,514
	CS - INFORMATION	2,302	3,381	3,930	4,360	102	124	124	124	2,404	3,505	4,053	4,484
	CS - OFFICE OPERATIONS	2,833	3,019	3,008	3,008	-	-	-	-	2,833	3,019	3,008	3,008
	CS - TECHNOLOGIES, POLICIES & SOLUTIONS	3,032	3,128	3,553	3,736	-	-	-	-	3,032	3,128	3,553	3,736
	CYBER SECURITY	4,130	4,609	4,768	5,080	2,113	2,233	2,307	2,396	6,243	6,842	7,075	7,476
	ENVIRONMENTAL	1,107	774	810	845	285	157	157	157	1,392	931	967	1,002
	FLEET & FACILITIES	4,930	5,468	5,605	5,605	232	343	372	372	5,162	5,811	5,978	5,978
	GAS CONTROL & SYSTEM OPERATIONS/PLANNING	4,480	4,556	5,048	5,114	-	-	-	-	4,480	4,556	5,048	5,114
	GAS DISTRIBUTION	616	235	235	235	-	-	-	-	616	235	235	235
	GAS ENGINEERING	8,503	10,263	10,594	13,101	-	-	-	-	8,503	10,263	10,594	13,101
	GAS SYSTEM INTEGRITY	7,208	10,802	12,943	15,510	-	148	148	148	7,208	10,950	13,091	15,658
	GAS TRANSMISSION	799	879	879	879	-	-	-	-	799	879	879	879
	HR, DISABILITY, WORKERS COMP & SAFETY	1,559	1,630	1,707	1,630	89	97	98	98	1,648	1,727	1,804	1,729
	INFORMATION TECHNOLOGY	34,700	35,235	36,409	37,066	12,914	13,182	13,342	13,530	47,614	48,417	49,751	50,596
	REAL ESTATE	11,408	16,423	18,559	20,556	219	235	234	234	11,627	16,658	18,794	20,790
	RISK MANAGEMENT	1,994	2,306	2,700	3,094	899	1,043	1,205	1,369	2,893	3,349	3,905	4,463
	SUPPLY MANAGEMENT & SUPPLIER DIVERSITY	2,033	2,239	2,401	2,584	670	814	933	985	2,703	3,053	3,334	3,569
	TIMP & DIMP	1,265	-	-	-	-	-	-	-	1,265	-	-	-
	UNDERGROUND STORAGE	251	240	240	240	-	-	-	-	251	240	240	240
Totals		101,059	114,467	122,911	132,158	19,503	20,668	21,201	21,694	120,562	135,135	144,112	153,852

Functional Area		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
Functional Area		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
	BUCU In (CorpCtr Reallocation) to SCG	1,159	1,420	1,478	1,512	710	786	815	826	1,869	2,206	2,294	2,337

Functional Area		Direct Costs				Overheads				(SUM) Fully Loaded Costs			
Functional Area		2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019
	Overhead Credit	-	-	-	-	(9,597)	(12,859)	(13,589)	(14,925)	(9,597)	(12,859)	(13,589)	(14,925)

TOTAL SCG Shared Services Forecast		2016	2017	2018	2019
		112,835	124,482	132,817	141,264

**SAN DIEGO GAS & ELECTRIC
Forecasted Shared Asset Projects
Test Year 2019 General Rate Case**

Asset Class	Project Description	Witness	In-Service-Date	Retained	SCG%	SECC%	UNREGS%
Shared Common IT Hardware	T19019 2017 SDGE Mainframe Capacity Hardware Upgrade	Olmsted, C.	12/31/2018	70%	30%	0%	0%
Shared Common IT Hardware	T19019 2017 SDGE Mainframe Capacity Hardware Upgrade	Olmsted, C.	10/31/2019	70%	30%	0%	0%
Shared Common IT Hardware	T16051 SDGE MAINFRAME CAPACITY UPGRADE AND HW TECH REFRESH	Olmsted, C.	3/31/2017	60%	40%	0%	0%
Shared Common Structures & Improvements	CP Pedestrian Site	Tattersall, R.	1/31/2017	95%	4%	1%	0%
Shared Common Structures & Improvements	CP Food Service Vehicles	Tattersall, R.	1/31/2017	95%	4%	1%	0%
Shared Common Structures & Improvements	CP Campus Fortification	Tattersall, R.	1/31/2017	95%	4%	1%	0%
Shared Common Structures & Improvements	CP Annex Plus Tenant Improvements	Tattersall, R.	12/31/2017	95%	4%	1%	0%
Shared Common Structures & Improvements	CP4 Refresh	Tattersall, R.	9/30/2019	95%	4%	1%	0%
Shared Common Structures & Improvements	CP6 EOC Tenant Improvements	Tattersall, R.	9/30/2019	95%	4%	1%	0%
Shared Common Structures & Improvements	CP5 Refresh	Tattersall, R.	12/31/2018	95%	4%	1%	0%
Shared Common Structures & Improvements	CP6-2 Customer Call Center Tenant Improvements	Tattersall, R.	4/30/2017	95%	4%	1%	0%
Shared Common Structures & Improvements	RBDC Server Room #1 CRAC Replacement	Tattersall, R.	6/30/2017	51%	45%	4%	0%
Shared Common Structures & Improvements	CP East Tenant Improvements	Tattersall, R.	3/31/2017	80%	19%	1%	0%
Shared Common Structures & Improvements	CP East Site Improvements	Tattersall, R.	12/31/2018	80%	19%	1%	0%
Shared Common Structures & Improvements	CP East IT Improvements	Tattersall, R.	9/30/2019	80%	19%	1%	0%
Shared Common Structures & Improvements	RBDC Power Reliability Improvements	Tattersall, R.	12/31/2017	51%	45%	4%	0%
Shared Common Structures & Improvements	RBDC Power Reliability Improvements Ph2	Tattersall, R.	6/30/2019	51%	45%	4%	0%
Shared Common Structures & Improvements	RBDC - C&D UPS Expansion	Tattersall, R.	12/31/2019	51%	45%	4%	0%

SOUTHERN CALIFORNIA GAS COMPANY
Forecasted Shared Asset Projects
Test Year 2019 General Rate Case

Asset Class	Project Description	Witness	In-Service-Date	Retained	SDGE%	SECC%	UNREGS%
General Plant - Communications	Distribution Operations Control Center and Technology Management	Bermel, M.	12/31/2019	80%	20%	0%	0%
General Plant - Communications	Distribution Operations Control Center and Technology Management	Bermel, M.	12/31/2019	80%	20%	0%	0%
General Plant - Communications 5 Yr	19043 Seu Call Recording Refresh	Olmsted, C.	11/30/2017	50%	40%	5%	5%
General Plant - Communications 5 Yr	RAMP - INCREMENTAL 19078 Emergency Field Communication Services	Olmsted, C.	12/31/2018	62%	34%	4%	0%
General Plant - Communications 5 Yr	84306 SEU SESSION BORDER CONTROLLERS REFRESH	Olmsted, C.	4/30/2017	50%	40%	10%	0%
General Plant - Communications 5 Yr	19079 Local Area Network Refresh (2018)	Olmsted, C.	12/31/2018	62%	34%	4%	0%
General Plant - Communications 5 Yr	19080 Local Area Network Refresh (2019)	Olmsted, C.	11/30/2019	62%	34%	4%	0%
General Plant - Communications 5 Yr	19087 Wide Area Network Refresh (2018)	Olmsted, C.	11/30/2018	62%	34%	4%	0%
General Plant - Communications 5 Yr	19088 Wide Area Network Refresh (2019)	Olmsted, C.	11/30/2019	62%	34%	4%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19061 Gas GIS 2017-2019	Olmsted, C.	12/31/2018	90%	10%	0%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19061 Gas GIS 2017-2019	Olmsted, C.	11/30/2019	90%	10%	0%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19063 M&R (CLICK) Image Document Management	Olmsted, C.	12/31/2018	60%	40%	0%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19063 M&R (CLICK) Image Document Management	Olmsted, C.	5/31/2019	60%	40%	0%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19072 GT Leak Survey	Olmsted, C.	2/28/2018	60%	40%	0%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 84312 RECORDS & INFO MGMT CONSOLIDATED SOL	Olmsted, C.	9/30/2017	80%	20%	0%	0%
General Plant - Computer Hardware	RAMP - Incremental Forensics System Rebuild	Worden, G.	3/31/2017	62%	34%	4%	0%
General Plant - Computer Hardware	RAMP - Incremental FOF - Converged Perimeter Security	Worden, G.	6/30/2018	62%	34%	4%	0%
General Plant - Computer Hardware	RAMP - Incremental SSL Decryption	Worden, G.	9/30/2017	62%	34%	4%	0%
General Plant - Computer Hardware	RAMP - Incremental IS Zone Rebuild	Worden, G.	11/30/2017	62%	34%	4%	0%
General Plant - Computer Hardware	RAMP - Incremental Web Applications and Database Firewalls	Worden, G.	9/30/2018	62%	34%	4%	0%
General Plant - Computer Hardware	RAMP - Incremental Perimeter Tap Infrastructure Redesign	Worden, G.	6/30/2018	62%	34%	4%	0%
General Plant - Computer Hardware	RAMP - Incremental Wired Network Preventative Controls	Worden, G.	4/30/2019	62%	34%	4%	0%
General Plant - Computer Hardware	RAMP - Incremental My Account Multi Factor Authentication	Worden, G.	4/30/2019	62%	34%	4%	0%
General Plant - Computer Hardware	84229 GIS MOBILE REPLACEMENT	Olmsted, C.	8/31/2017	71%	29%	0%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19066 Enhanced M&R KPI and Analytic Reports	Olmsted, C.	12/31/2018	60%	40%	0%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19067 Field Data Collection with eForm	Olmsted, C.	12/31/2018	94%	6%	0%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19075 Gas Materials Traceability Wave 3 & Wave 4	Olmsted, C.	12/31/2018	90%	10%	0%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19075 Gas Materials Traceability Wave 3 & Wave 4	Olmsted, C.	12/31/2018	90%	10%	0%	0%
General Plant - Computer Hardware	19085 Web Portal and Application Modernization	Olmsted, C.	11/30/2018	62%	34%	4%	0%
General Plant - Computer Hardware	19098 Big Data Advanced Analytics Enablement on SAS	Olmsted, C.	5/31/2018	60%	40%	0%	0%
General Plant - Computer Hardware	84308 Network Core Refresh (Qfabric Refresh)	Olmsted, C.	3/31/2017	62%	35%	3%	0%
General Plant - Computer Hardware	19076 Business Continuity Enhancement	Olmsted, C.	12/31/2017	62%	34%	4%	0%
General Plant - Computer Hardware	19076 Business Continuity Enhancement	Olmsted, C.	12/31/2018	62%	34%	4%	0%
General Plant - Computer Hardware	19076 Business Continuity Enhancement	Olmsted, C.	11/30/2019	62%	34%	4%	0%
General Plant - Computer Hardware	19077 Converged Computing Infrastructure 2018-2019	Olmsted, C.	12/31/2018	62%	34%	4%	0%
General Plant - Computer Hardware	19077 Converged Computing Infrastructure 2018-2019	Olmsted, C.	10/31/2019	60%	36%	4%	0%
General Plant - Computer Hardware	84305 CONVERGED COMPUTING INFRASTRUCTURE	Olmsted, C.	6/30/2017	62%	34%	4%	0%
General Plant - Computer Hardware	19132 Pure Storage Upgrade	Olmsted, C.	9/30/2017	62%	34%	4%	0%
General Plant - Computer Hardware	RAMP - INCREMENTAL 19114 FoF - GOPA Phase 4	Olmsted, C.	4/30/2017	60%	40%	0%	0%
General Plant - Computer Hardware	19117 FoF - Employee Care Services iVOS Claims System Ventiv eSolutions (Valley Oaks System)	Olmsted, C.	4/30/2018	74%	25%	1%	0%
General Plant - Software 5-8 Yrs	84207 SEU CCC GENESYS REFRESH	Olmsted, C.	2/28/2017	75%	25%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19060 3DPM-Work Order Sketching 2018 & 2019	Olmsted, C.	12/31/2018	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19060 3DPM-Work Order Sketching 2018 & 2019	Olmsted, C.	12/31/2018	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19060 3DPM-Work Order Sketching 2018 & 2019	Olmsted, C.	11/30/2019	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19060 3DPM-Work Order Sketching 2018 & 2019	Olmsted, C.	11/30/2019	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19061 Gas GIS 2017-2019	Olmsted, C.	12/31/2018	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19061 Gas GIS 2017-2019	Olmsted, C.	11/30/2019	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19063 M&R (CLICK) Image Document Management	Olmsted, C.	12/31/2018	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19063 M&R (CLICK) Image Document Management	Olmsted, C.	5/31/2019	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19072 GT Leak Survey	Olmsted, C.	12/31/2018	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19072 GT Leak Survey	Olmsted, C.	9/30/2019	60%	40%	0%	0%

SOUTHERN CALIFORNIA GAS COMPANY
Forecasted Shared Asset Projects
Test Year 2019 General Rate Case

Asset Class	Project Description	Witness	In-Service-Date	Retained	SDGE%	SECC%	UNREGS%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19094 Click Enhancements Project	Olmsted, C.	12/31/2017	70%	30%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19094 Click Enhancements Project	Olmsted, C.	12/31/2018	70%	30%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19094 Click Enhancements Project	Olmsted, C.	3/31/2019	70%	30%	0%	0%
General Plant - Software 5-8 Yrs	19095 GEARS Upgrade - Ent. GIS 10.x	Olmsted, C.	12/31/2017	50%	50%	0%	0%
General Plant - Software 5-8 Yrs	19095 GEARS Upgrade - Ent. GIS 10.x	Olmsted, C.	12/31/2018	50%	50%	0%	0%
General Plant - Software 5-8 Yrs	19095 GEARS Upgrade - Ent. GIS 10.x	Olmsted, C.	3/31/2019	50%	50%	0%	0%
General Plant - Software 5-8 Yrs	19096 Sempra Lease Accounting and Reporting System	Olmsted, C.	12/31/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19096 Sempra Lease Accounting and Reporting System	Olmsted, C.	3/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19097 WebEOC Applications Replacement Project	Olmsted, C.	12/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19097 WebEOC Applications Replacement Project	Olmsted, C.	4/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	84290 HIGH OFO_EFO TCAP ENVOY	Olmsted, C.	8/31/2017	94%	6%	0%	0%
General Plant - Software 5-8 Yrs	81480 LOW OFO AND EFO	Olmsted, C.	8/31/2017	94%	6%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84255 3DPM WORK ORDER SKETCHING 2016 & 2017	Olmsted, C.	12/31/2017	91%	9%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84255 3DPM WORK ORDER SKETCHING 2016 & 2017	Olmsted, C.	3/31/2018	91%	9%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84206 GAS GIS 2015 & 2016	Olmsted, C.	3/31/2017	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84281 OSI PI GAS OPS DATA HISTORIAN & REPORTING	Olmsted, C.	12/31/2017	94%	6%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84281 OSI PI GAS OPS DATA HISTORIAN & REPORTING	Olmsted, C.	7/31/2018	94%	6%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84298 RECORD & INFO MGMT SYSTEMS	Olmsted, C.	2/28/2017	94%	6%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84312 RECORDS & INFO MGMT CONSOLIDATED SOL	Olmsted, C.	12/31/2017	80%	20%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84312 RECORDS & INFO MGMT CONSOLIDATED SOL	Olmsted, C.	7/31/2018	80%	20%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84312 RECORDS & INFO MGMT CONSOLIDATED SOL	Olmsted, C.	4/30/2017	80%	20%	0%	0%
General Plant - Software 5-8 Yrs	84299 Supply Mgmt Analytics & Reporting	Olmsted, C.	6/30/2017	55%	40%	5%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19131 HP GAS CONSTRUCT RECORDS & INFO MGMT SOLUTION PH2	Olmsted, C.	12/31/2018	80%	20%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19131 HP GAS CONSTRUCT RECORDS & INFO MGMT SOLUTION PH2	Olmsted, C.	10/31/2019	80%	20%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental PKI Rebuild	Worden, G.	1/31/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Threat Response systems	Worden, G.	11/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Threat Response systems	Worden, G.	Routine	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Threat Recovery systems	Worden, G.	11/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Threat Recovery systems	Worden, G.	Routine	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Firewall Security	Worden, G.	2/28/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Enterprise Threat Intelligence	Worden, G.	6/30/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Enterprise Threat Intelligence	Worden, G.	6/30/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Insider Threat Detection / Prevention	Worden, G.	10/31/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Insider Threat Detection / Prevention	Worden, G.	10/31/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental FOF - Host Based Protection	Worden, G.	10/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental FOF - Host Based Protection	Worden, G.	3/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Email Spam Protection	Worden, G.	10/31/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Email Spam Protection	Worden, G.	10/31/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Network Security Monitoring	Worden, G.	4/30/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Network Security Monitoring	Worden, G.	4/30/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Security Orchestration	Worden, G.	3/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Security Orchestration	Worden, G.	3/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Critical Gas Infrastructure Protection	Worden, G.	11/30/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Critical Gas Infrastructure Protection	Worden, G.	11/30/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Critical Gas Infrastructure Protection - 2018	Worden, G.	10/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Critical Gas Infrastructure Protection - 2018	Worden, G.	10/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Critical Gas Infrastructure Protection - 2019	Worden, G.	10/31/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Critical Gas Infrastructure Protection - 2019	Worden, G.	10/31/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental CASB (cloud data use)	Worden, G.	8/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental CASB (cloud data use)	Worden, G.	8/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Incident Response Secure Collaboration	Worden, G.	9/30/2018	62%	34%	4%	0%

SOUTHERN CALIFORNIA GAS COMPANY
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Asset Class	Project Description	Witness	In-Service-Date	Retained	SDGE%	SECC%	UNREGS%
General Plant - Software 5-8 Yrs	RAMP - Incremental Incident Response Secure Collaboration	Worden, G.	9/30/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Enterprise Source Code Security	Worden, G.	3/31/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Enterprise Source Code Security	Worden, G.	3/31/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Multi Factor Authentication Refresh	Worden, G.	10/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Multi Factor Authentication Refresh	Worden, G.	10/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Threat Identification systems	Worden, G.	11/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Threat Identification systems	Worden, G.	11/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Threat Detection systems	Worden, G.	11/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	RAMP - Incremental Threat Detection systems	Worden, G.	11/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	84273 SCG VIRTUAL DESKTOP EXPANSION (VDI)	Olmsted, C.	5/31/2017	62%	35%	3%	0%
General Plant - Software 5-8 Yrs	19045 ACT/CCM Refresh Project	Olmsted, C.	12/31/2018	70%	30%	0%	0%
General Plant - Software 5-8 Yrs	19045 ACT/CCM Refresh Project	Olmsted, C.	3/31/2019	70%	30%	0%	0%
General Plant - Software 5-8 Yrs	19049 ENVOY Generation MA (Microservice Architecture)	Olmsted, C.	12/31/2018	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	19049 ENVOY Generation MA (Microservice Architecture)	Olmsted, C.	10/31/2019	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	19051 Major Markets Systems Enhancements	Olmsted, C.	12/31/2018	97%	3%	0%	0%
General Plant - Software 5-8 Yrs	19051 Major Markets Systems Enhancements	Olmsted, C.	12/31/2019	97%	3%	0%	0%
General Plant - Software 5-8 Yrs	19051 Major Markets Systems Enhancements	Olmsted, C.	12/31/2018	97%	3%	0%	0%
General Plant - Software 5-8 Yrs	84254 SEU CCC WORKFORCE MGMT OPT SOLUTION	Olmsted, C.	5/31/2017	75%	25%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 81452 CLICK UPGRADE (CU)	Olmsted, C.	3/31/2017	64%	36%	0%	0%
General Plant - Software 5-8 Yrs	81495 FINANCIAL PLNG & BUDGETING	Olmsted, C.	3/31/2017	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	84325 SOFTWARE DEFINED DATA CENTER	Olmsted, C.	6/30/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	84295 OFFICE 365 ENABLEMENT & ADOPTION	Olmsted, C.	8/31/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19126 IAM NextGen	Olmsted, C.	12/31/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19126 IAM NextGen	Olmsted, C.	11/30/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19129 FoF - Integrated Supplier Portal	Olmsted, C.	10/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19129 FoF - Integrated Supplier Portal	Olmsted, C.	5/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	84284 TARIFF MANAGER 2 REPLACEMENT	Olmsted, C.	4/30/2017	50%	50%	0%	0%
General Plant - Software 5-8 Yrs	84293 SAP ECC ON HANA	Olmsted, C.	12/31/2017	62%	35%	3%	0%
General Plant - Software 5-8 Yrs	84293 SAP ECC ON HANA	Olmsted, C.	6/30/2017	62%	35%	3%	0%
General Plant - Software 5-8 Yrs	84293 SAP ECC ON HANA	Olmsted, C.	3/31/2018	62%	35%	3%	0%
General Plant - Software 5-8 Yrs	84229 GIS MOBILE REPLACEMENT	Olmsted, C.	12/31/2017	71%	29%	0%	0%
General Plant - Software 5-8 Yrs	84248 2019 RO MODEL & GRID ENHANCEMENT	Olmsted, C.	7/31/2017	50%	50%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19066 Enhanced M&R KPI and Analytic Reports	Olmsted, C.	12/31/2018	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19067 Field Data Collection with eForm	Olmsted, C.	12/31/2018	94%	6%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19067 Field Data Collection with eForm	Olmsted, C.	11/30/2019	94%	6%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19071 Measurement & Reliability Compliance (MRC) CPD Metrics & Analytics	Olmsted, C.	12/31/2017	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19071 Measurement & Reliability Compliance (MRC) CPD Metrics & Analytics	Olmsted, C.	12/31/2017	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19071 Measurement & Reliability Compliance (MRC) CPD Metrics & Analytics	Olmsted, C.	2/28/2018	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19073 Enhanced Operations & Compliance Departmental Reporting System	Olmsted, C.	11/30/2017	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19073 Enhanced Operations & Compliance Departmental Reporting System	Olmsted, C.	11/30/2017	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19075 Gas Materials Traceability Wave 3 & Wave 4	Olmsted, C.	12/31/2017	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19075 Gas Materials Traceability Wave 3 & Wave 4	Olmsted, C.	3/31/2019	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	19084 Sensitive Data Protection	Olmsted, C.	6/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19084 Sensitive Data Protection	Olmsted, C.	6/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19085 Web Portal and Application Modernization	Olmsted, C.	11/30/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19086 Software Defined Data Center Refresh 2019	Olmsted, C.	11/30/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19098 Big Data Advanced Analytics Enablement on SAS	Olmsted, C.	5/31/2018	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	19099 Enterprise BPM Workflow	Olmsted, C.	5/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19099 Enterprise BPM Workflow	Olmsted, C.	5/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19100 Environmental Tracking System Enhancements	Olmsted, C.	11/30/2018	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	19101 SAP BI & Analytics Platform Upgrade	Olmsted, C.	11/30/2018	62%	34%	4%	0%

SOUTHERN CALIFORNIA GAS COMPANY
Forecasted Shared Asset Projects
Test Year 2019 General Rate Case

Asset Class	Project Description	Witness	In-Service-Date	Retained	SDGE%	SECC%	UNREGS%
General Plant - Software 5-8 Yrs	19106 Source Code Management Modernization	Olmsted, C.	11/30/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	84271 FoF - SUPPLY MANAGEMENT TRANSACTION ENABLEMENT	Olmsted, C.	4/30/2017	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19118 Enterprise Data Layer Ph1	Olmsted, C.	12/31/2018	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	19118 Enterprise Data Layer Ph1	Olmsted, C.	12/31/2018	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	19118 Enterprise Data Layer Ph1	Olmsted, C.	3/31/2019	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	19118 Enterprise Data Layer Ph1	Olmsted, C.	3/31/2019	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 84225 GIS UPGRADE	Olmsted, C.	8/31/2017	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	19111 FoF - PACER OCS - Order Re-Prioritization Project Phase II	Olmsted, C.	12/31/2017	95%	5%	0%	0%
General Plant - Software 5-8 Yrs	19111 FoF - PACER OCS - Order Re-Prioritization Project Phase II	Olmsted, C.	12/31/2018	95%	5%	0%	0%
General Plant - Software 5-8 Yrs	19111 FoF - PACER OCS - Order Re-Prioritization Project Phase II	Olmsted, C.	11/30/2019	95%	5%	0%	0%
General Plant - Software 5-8 Yrs	19111 FoF - PACER OCS - Order Re-Prioritization Project Phase II	Olmsted, C.	12/31/2018	95%	5%	0%	0%
General Plant - Software 5-8 Yrs	19111 FoF - PACER OCS - Order Re-Prioritization Project Phase II	Olmsted, C.	11/30/2019	95%	5%	0%	0%
General Plant - Software 5-8 Yrs	81469 ENVOY NEXT GENERATION	Olmsted, C.	8/31/2017	90%	10%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19114 FoF - GOPA Phase 4	Olmsted, C.	12/31/2017	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19114 FoF - GOPA Phase 4	Olmsted, C.	12/31/2018	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	RAMP - INCREMENTAL 19114 FoF - GOPA Phase 4	Olmsted, C.	5/31/2019	60%	40%	0%	0%
General Plant - Software 5-8 Yrs	19115 FoF - Operational Awareness	Olmsted, C.	12/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19115 FoF - Operational Awareness	Olmsted, C.	12/31/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19116 FoF - Claims Analytics	Olmsted, C.	12/31/2018	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19116 FoF - Claims Analytics	Olmsted, C.	10/31/2019	62%	34%	4%	0%
General Plant - Software 5-8 Yrs	19117 FoF - Employee Care Services iVOS Claims System Ventiv eSolutions (Valley Oaks System)	Olmsted, C.	12/31/2017	74%	25%	1%	0%
General Plant - Software 5-8 Yrs	19117 FoF - Employee Care Services iVOS Claims System Ventiv eSolutions (Valley Oaks System)	Olmsted, C.	12/31/2018	74%	25%	1%	0%
General Plant - Software 5-8 Yrs	19117 FoF - Employee Care Services iVOS Claims System Ventiv eSolutions (Valley Oaks System)	Olmsted, C.	3/31/2019	74%	25%	1%	0%

**Segmentation of Non-Labor Overheads into Business Segments
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case**

Line	Account	Description	Overhead Allocated To:			Total Overhead (2016 \$)	Electric	Elec Generation	Gas
			Electric (2016 \$)	Elec Generation (2016 \$)	Gas (2016 \$)		Segmentation Rate	Segmentation Rate	Segmentation Rate
			(A)	(B)	(C)	(D) = A + B + C	(E) = A / D	(F) = B / D	(G) = C / D
1									
2	163.1	Warehousing	3,501,765	47,341	349,428	3,898,534	89.8%	1.2%	9.0%
3	163.2	Purchasing	4,260,033	191,330	1,262,871	5,714,234	74.6%	3.3%	22.1%
4	184.2	Fleet	22,023,329	52,747	6,067,386	28,143,463	78.2%	0.2%	21.6%
5	184.3	Shops	404,037	430	137,202	541,669	74.6%	0.1%	25.3%
6	184.6	Exempt Material	7,543,577	65,046	1,375,149	8,983,772	84.0%	0.7%	15.3%
7	184.7	Small Tools	3,420,633	3,627	1,167,820	4,592,081	74.5%	0.1%	25.4%

SAN DIEGO GAS & ELECTRIC
Derivation of 2016 Percentages of Common Accounts allocated to Electric and Gas Segments
Customer Accounts (FERC 901 - 905)
Test Year 2019 General Rate Case

Line	Description	Electric (2015 \$)	%	Gas (2015 \$)	%
1					
2	TOTAL CUSTOMERS	1,426,368	62.04%	872,883	37.96%
3	Less: Comb. Customers	872,883			
4	Electric Only - Reg	<u>553,485</u>			
5					
6	TOTAL WEIGHTED CUSTOMERS	Customers	Weights	Wtd. Total	
7	Combined Customers	872,883	2	872,883	
8				872,883	
9	Electric Only - Reg.	553,485	1-1/3	737,980	
10	Total	<u>1,426,368</u>		<u>2,483,746</u>	
11					
12	ALLOCATION FACTORS	Electric	Gas	Total	
13					
14	Combined Customers, Segmented	872,883	872,883	1,745,766	
15	Wtd Elec Only Customers	737,980		737,980	
16	Total	<u>1,610,863</u>	872,883	<u>2,483,746</u>	
17					
18	GRC Segmentation Rate for Customer Accounts	64.9%	35.1%	100.0%	

SAN DIEGO GAS & ELECTRIC
Derivation of 2016 Percentages of Common Accounts allocated to Electric and Gas Segments
Customer Information & Services (FERC 907 - 910)
Test Year 2019 General Rate Case

Line	Activity	Electric (2015 \$)	Gas (2015 \$)	Total (2015 \$)	Source
1		(A)	(B)	(C)	
2	Customer Information & Services	\$ 173,382,740	\$ 25,067,354	\$ 198,450,094	FERC Form 1, p 323, Line 171 & Form 2, p 325, Line 244
3		(D) = A / C	(E) = B / C		
4		<u>87.4%</u>	<u>12.6%</u>	<u>100.0%</u>	

SAN DIEGO GAS & ELECTRIC
Derivation of 2016 Percentages for Business Segment Allocation of A&G
FERC 920 - 935, with Exclusions
Test Year 2019 General Rate Case

Line	Description	Amount (2015 \$)	Worksheet Tab Reference
1			
2	DIRECT SALARY AND WAGES FOR ELECTRIC OPERATION AND MAINTENANCE		
3	Total Salary and Wages for Electric Segment, Electric Distribution/Transmission O&M	107,883,548	FERC Form 1, pg 354 - 355, Lines 2, 3, 4, 5, 9, 10
4	**Add: Salary and Wages for Procurement recovered under Electric Distribution rates	<u>5,637,976</u>	FERC 556/557 Expenses
5	Total Salary and Wages for Electric Generation Segment	113,521,525	
6			
7	DIRECT SALARY AND WAGES FOR COMPANY OPERATIONS AND MAINTENANCE		
8	Total Company Salary and Wages for Operation and Maintenance	213,507,065	FERC Form 1, pg 354 - 355, Line 26
9	Less: Salary and Wages for Administrative and General	(53,246,606)	FERC Form 1, pg 354 - 355, Lines 7, 11, 20, 24
10			
11	Total Company Salary and Wages for Operation and Maintenance Excluding A&G	<u><u>160,260,459</u></u>	
12			
13	GRC Electric A&G O&M, excluding Electric Generation	70.8%	[Calculated - Line 5/Line 11]
14			
15	DIRECT SALARY AND WAGES FOR ELECTRIC GENERATION OPERATION AND MAINTENANCE		
16	Total Salary and Wages for Electric Production O&M	12,801,765	FERC Form 1, pg 354 - 355, Lines 1, 8
17	**Less: Salary and Wages for Procurement recovered under Electric Distribution rates	<u>(5,637,976)</u>	FERC 556/557 Expenses
18	Total Salary and Wages for Electric Generation Segment	7,163,789	
19			
20	DIRECT SALARY AND WAGES FOR COMPANY OPERATIONS AND MAINTENANCE		
21	Total Company Salary and Wages for Operation and Maintenance	213,507,065	FERC Form 1, pg 354 - 355, Line 26
22	Less: Salary and Wages for Administrative and General	(53,246,606)	FERC Form 1, pg 354 - 355, Lines 7, 11, 20, 24
23			
24	Total Company Salary and Wages for Operation and Maintenance Excluding A&G	<u><u>160,260,459</u></u>	
25			
26	GRC Electric Generation A&G O&M	4.5%	[Calculated - Line 18/Line 24]
27			
28	DIRECT SALARY AND WAGES FOR GAS OPERATION AND MAINTENANCE		
29	Total Salary and Wages for Gas Segment, O&M	39,575,146	FERC Form 1, pg 354 - 355, Line 14, 15, 16, 17, 18, 22, 23
30			
31	DIRECT SALARY AND WAGES FOR COMPANY OPERATIONS AND MAINTENANCE		
32	Total Company Salary and Wages for Operation and Maintenance	213,507,065	FERC Form 1, pg 354 - 355, Line 26
33	Less: Salary and Wages for Administrative and General	(53,246,606)	FERC Form 1, pg 354 - 355, Lines 7, 11, 20, 24
34			
35	Total Company Salary and Wages for Operation and Maintenance Excluding A&G	<u><u>160,260,459</u></u>	
36			
37	GRC Gas A&G O&M	24.7%	[Calculated - Line 29/Line 35]

**SAN DIEGO GAS & ELECTRIC
Allocation of Cleaing Accounts & Labor Overheads to Capital
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case**

Line Pool	% Capital	Total OH Loaded (2016 \$)	Total Capital (2016 \$)	<u>PCAT</u>	<u>PCAT</u>	<u>PCAT</u>
				Capital (2016 \$)	Special Billables ¹ (2016 \$)	O&M and Other ² (2016 \$)
1	(F) = D / E	(E) = C + D	(D) = A + B	(A)	(B)	(C)
2 Warehousing	86.0%	3,898,534	3,354,079	3,216,610	137,469	544,455
3 Purchasing	70.2%	5,714,234	4,009,609	3,881,968	127,640	1,704,625
4 Shops	45.8%	541,669	248,147	224,903	23,244	293,521
5 <i>Exempt Material - Elec</i>		<i>7,555,267</i>	<i>7,111,592</i>	<i>6,907,631</i>	<i>203,962</i>	<i>443,674</i>
6 <i>Exempt Material - Gas</i>		<i>1,428,505</i>	<i>1,194,066</i>	<i>1,153,180</i>	<i>40,886</i>	<i>234,439</i>
7 Exempt Material, Summary	92.5%	<u>8,983,772</u>	<u>8,305,659</u>			<u>678,113</u>
8 Small Tools	45.9%	4,592,081	2,107,464	1,909,276	198,188	2,484,616
9 Variable Pay (ICP)	42.4%	77,548,047	32,879,412	31,295,160	1,584,252	44,668,634
10 PLPD	41.1%	18,729,717	7,688,640	7,216,564	472,076	11,041,077
11 Workers' Compensation	42.2%	4,848,744	2,045,244	1,925,483	119,761	2,803,500
12 Employee Benefits	42.2%	70,352,931	29,671,326	27,933,323	1,738,003	40,681,605
13 Pension & PBOP	38.7%	9,259,546	3,584,137	3,363,647	220,490	5,675,409

Footnotes

¹ SDG&E considers Special Billable costs to be included in Capital work, as a predominant amount of costs are included in the fixed asset ledger accounts or other balance sheet (capital) accounts.

² Other includes Refundable and Affiliate Billing costs.

**SAN DIEGO GAS & ELECTRIC
Fleet Reassignments to Capital
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case**

Line	Business Segment	% Capital	Total Fleet (2016 \$)	Total Capital (2016 \$)	<u>PCAT</u> Capital (2016 \$)	<u>PCAT</u> Special Billables ¹ (2016 \$)	<u>PCAT</u> O&M and Other ² (2016 \$)
1		(F) = D / E	(E) = C + D	(D) = A + B	(A)	(B)	(C)
2	Summary Total	54.8%	28,143,463	15,420,146	14,556,531	863,615	12,723,317
3	Electric		22,023,329		12,603,770	650,388	8,769,171
4	Gas		6,120,133		1,952,761	213,227	3,954,146

Footnotes

¹ SDG&E considers Special Billable costs to be included in Capital work, as a predominant amount of costs are included in the fixed asset ledger accounts or other balance sheet (capital) accounts.

² Other includes Refundable and Affiliate Billing costs.

**SAN DIEGO GAS & ELECTRIC
Reassignment of A&G Expenses to Capital
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case**

Line	Company	A&G Costs Allocated to Capital Jobs (2016 \$)	Total A&G Costs Subject to Capitalization (2016 \$)	GRC A&G Reassignment to Capital Rate
		(A)	(B)	(C) = A / B
1				
2	SDG&E	9,958,610	116,238,619	
3	Sempra Energy	8,000,028	85,252,532	
4	SCG	767,077	71,848,524	
5				
6	Summary Total	18,725,715	273,339,676	6.9%

Notes:

(B) Costs subject to capitalization include FERC 920,921,923

SAN DIEGO GAS & ELECTRIC
Carve-Out Allocation of Clearing Accounts from Electric, excl. Generation, to Electric Transmission O&M
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case

Line Account	Description	<u>Overhead Allocated To:</u>		Total Electric, excl. Generation (2016 \$)	Electric Transmission O&M Rate Rate
		Electric Distribution (2016 \$)	Electric Transmission (2016 \$)		
1		(A)	(B)	(C) = A + B	(D) = B / C
2	163.1 Warehousing	171,702	293,189	464,891	63.1%
3	163.2 Purchasing	1,055,339	269,019	1,324,357	20.3%
4	184.2 Fleet	6,285,083	2,484,088	8,769,171	28.3%
5	184.3 Shops	149,330	42,236	191,566	22.0%
6	184.6 Exempt Material	242,858	162,024	404,882	40.0%
7	184.7 Small Tools	1,258,796	356,863	1,615,659	22.1%

SAN DIEGO GAS & ELECTRIC
Carve-Out Allocation of Clearing Accounts from Electric, excl. Generation, to Electric Transmission Capital
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case

Line	Account	Description	Overhead Allocated To:		Total Electric, excl. Generation (2016 \$)	Electric Transmission O&M Rate Rate
			Electric Distribution (2016 \$)	Electric Transmission (2016 \$)		
			(A)	(B)	(C) = A + B	(D) = B / C
1						
2	163.1	Warehousing	2,958,213	78,661	3,036,874	2.6%
3	163.2	Purchasing	1,328,155	1,607,521	2,935,676	54.8%
4	184.2	Fleet	10,273,499	2,980,659	13,254,158	22.5%
5	184.3	Shops	162,808	49,663	212,471	23.4%
6	184.6	Exempt Material	3,144,918	3,993,777	7,138,694	55.9%
7	184.7	Small Tools	1,381,873	423,101	1,804,974	23.4%

SDG&E
COMMON ACCOUNT ALLOCATIONS
2016
(using 2015 actuals)

COMMON ACCOUNT DESCRIPTION	COMMON ACCOUNT RANGE	ELECTRIC	GAS		ET	ED	Generation	
Customer Accounts	901-905	64.9%	35.1%	100.0%				
Customer Service & Sales	907-916	87.4%	12.6%	100.0%				
Administrative & General	920-923	75.3%	24.7%	100.0%	17.0%	77.1%	5.9%	100.0%
Property Insurance	924	87.7%	12.3%	100.0%				
Injuries & Damages	925	75.3%	24.7%	100.0%	17.0%	77.1%	5.9%	100.0%
Pensions & Benefits	926	75.3%	24.7%	100.0%	17.0%	77.1%	5.9%	100.0%
Misc. Admin & General	928-935	75.3%	24.7%	100.0%	17.0%	77.1%	5.9%	100.0%
Depreciation and Amortization	403-404	75.3%	24.7%	100.0%				
Taxes other than Income Tax	408100C	75.3%	24.7%	100.0%				

Notes

**Document provided by Regulatory Accounting

SAN DIEGO GAS & ELECTRIC
Derivation of Grossed-Up 2016 Electric Transmission O&M Allocation Rate
Administrative & General Account (FERC 920.0 - FERC 935.6, with Exclusions)
Test Year 2019 General Rate Case

Line	Description of Action	Rate (from Common Alloc)	
1	Derived Electric Rate for A&G	75.3%	(A)
2			
3	Electric Generation Rate, subject to Electric ratio	5.9%	(B)
4			
5	Calculation to show Electric Generation as its own Business Segment	4.5%	(C) = A * B
6	(shows same result as SDG&E-32-SEG-WP-4, Line 26)		
7			
8	Derived Electric Distribution Rate, when proportioned thru Electric	77.1%	(D)
9			
10	Derived Electric Rate for A&G	75.3%	(A)
11			
12	Less Electric Generation as its own Business Segment	4.5%	(C)
13			
14	Remaining Electric Rate (combined as Elec Distribution and Elec Transmission)	70.8%	(E) = A - C
15			
16	FACTOR of Derived Elec Rate / Remaining Electric Rate, excl. Elec Generation	1.09	(F) = D / E
17			
18	Derived Electric Transmission Rate, when proportioned thru Electric	17.0%	(G)
19			
20	Grossed-Up Electric Transmission Rate, as a proportion of Electric, excl. Elec Generation	<u>18.5%</u>	(H) = F * G

SAN DIEGO GAS & ELECTRIC
Derivation of 2016 Percentages of Electric Transmission Capital Allocation
FERC Accounts: 920.0 - 923.2, 925.0 - 925.1, 926.0 - 926.5
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case

Line Description	Amounts (2016 \$)
1	
2 Salary and Wages for Electric Transmission Capital Jobs	20,047,001 (A)
3	
4 DIRECT SALARY AND WAGES FOR ELECTRIC CAPITAL JOBS	
5 Total Salary and Wages, Electric, including Capital Removal	71,607,286
6 **Less: Total Salary and Wages, Electric Generation (FERC 310-317 & 340-347)	145,142
7 Net Direct Salary and Wages for Electric Capital Jobs	71,462,144 (B)
8	
9 GRC Electric Transmisison Capital Allocation Rate (excluding Electric Generation)	28.1% (C) = A / B

Notes:

Costs were identified by detailed FERC review and budget parameters alongside the Segmentation process.

SAN DIEGO GAS & ELECTRIC
Derivation of 2016 Electric Transmission O&M Allocation Rate
Property Insurance (FERC Account 924)
Test Year 2019 General Rate Case
(\$ in thousands)

Line	Description		Electric (2015 \$)	Electric Generation* (2015 \$)	Total Electric (2015 \$)	Gas (2015 \$)	Total (2015 \$)	Reference
1								
2	Total Distribution Plant ¹	(A)	5,608,558		5,608,558	1,534,436	7,142,994	Statement AD
3	Total Transmission Plant ²	(B)	4,574,358		4,574,358		4,574,358	Statement AD
4	Total Steam Production Plant (Electric Generation)			548,493	548,493		548,493	Statement AD
5	Total Other Production Plant (Electric Generation)			485,944	485,944		485,944	Statement AD
6	General Plant		293,307	18,523	311,830		311,830	*Allocation of Common Plant
7	Common Plant		426,677	26,945	453,622	143,563	597,185	*Allocation of Common Plant
8	Total Plant in Service Excluding SONGS & Miscellaneous Intangible Plant		<u>10,902,900</u>	<u>1,079,905</u>	<u>11,982,805</u>	<u>1,677,999</u>	<u>13,660,804</u>	
9			(E)	(F)		(G)	(H)	
10								
11	Business Segment Allocation Factor		<u>79.8%</u>	<u>7.9%</u>		<u>12.3%</u>		
12			(I) = E / H	(J) = F / H		(K) = G / H		
13								
14	Total Electric Plant (not including Generation, General, Common)	(C) = A + B	10,182,916					
15								
16	Transmission Plant Property Insurance Allocation Factor	(D) = B / C	<u>44.9%</u>					

Notes:

*Electric Common and General Plant allocated to Electric Generation based on 5.94% labor ratio

Footnote:

¹ The balance for Electric Distribution plant is derived base on a simple average balance using beginning and ending year balances

² The balance for Electric Transmission plant is derived based on a 13-month average balance

SAN DIEGO GAS & ELECTRIC
Derivation of 2016 Electric Transmission O&M Allocation Rate
Wildfire Insurance (FERC 925.5)
Test Year 2019 General Rate Case
(\$ in thousands)

Line	Description	Amount (2015 \$)	Reference
1			
2	DIRECT SALARY AND WAGES FOR ELECTRIC TRANSMISSION OPERATION AND MAINTENANCE		
3	Total Salary and Wages for Electric Transmission	<u>20,459,885</u>	FERC Form 1, pp 354 & 355 - Lines 2, 9
4			
5	DIRECT SALARY AND WAGES FOR OPERATION AND MAINTENANCE		
6	Total Electric Salary and Wages for Operation and Maintenance	161,190,386	FERC Form 1, pp 354 & 355 - Line 12
7	Less: Salary and Wages for Electric Generation, net of costs recovered in Electric Distribution	(7,163,789)	SDG&E-32-SEG-WP-4, Line 18
8	Less: Salary and Wages for Administrative and General	<u>(40,505,073)</u>	FERC Form 1, pp 354 & 355 - Line 7, 11
9	Net Company Salary and Wages for Operation and Maintenance	<u>113,521,524</u>	
10			
11	GRC Electric Transmission O&M Allocation Rate for Wildfire Insurance	18.0%	[Calculated - Line 3/Line 9]

**2015 SDG&E FERC Form 1 Page 354 - 355
For Use to Identify 2016 SDG&E Activity Reassignments & Allocations**

Line	Classification	Direct Payroll	Clearing Allocation	Total
1	El Prod	10,952,626		
2	El Trans	12,049,458		
3	El Dist	35,536,663		
4	El Cust Accts	17,215,796		
5	El Cust Svc and Info	21,388,365		
6	El Sales	-		
7	El A&G	39,144,291		
8	Maint Prod	1,849,139		
9	Maint Trans	8,410,427		
10	Maint Dist	13,282,839		
11	Maint A&G	1,360,782		
12	Electric Total	161,190,386	46,185,194	207,375,580
13	Gas Ops, Prod, Other Supply	-		
14	Gas Ops, Storage	57,078		
15	Gas Ops, Trans	1,812,506		
16	Gas Ops, Dist	17,751,986		
17	Gas Ops, Cust Accts	8,404,006		
18	Gas Ops, Cust Svc and Info	2,880,633		
19	Gas Ops, Sales	-		
20	Gas Ops, A&G	12,312,264		
21	Gas Maint, Storage	-		
22	Gas Maint, Trans	3,460,490		
23	Gas Maint, Dist	5,208,447		
24	Gas Maint, A&G	429,269		
25	Gas Total	52,316,679	13,740,286	66,056,966
26	Total Operational & Maintenance	213,507,065	59,925,480	273,432,546
27	Cap Const, Elec Plant	58,126,178	105,650,392	163,776,569
28	Cap Const, Gas Plant	10,853,711	15,707,506	26,561,217
29	Plant Total	68,979,889	121,357,898	190,337,787
30	Cap Removal, Elect Plant	7,457,421	11,948,439	19,405,860
31	Cap Removal, Gas Plant	332,612	288,614	621,226
32	Capital Removal Total	7,790,033	12,237,052	20,027,086
33	3rd Party Billings, Gas	6,899	1,131,695	1,138,594
34	3rd Party Billings, Electric	772,822	4,049,836	4,822,658
35	3rd party Billing Total	779,720	5,181,531	5,961,252
36	Affiliate Billings, Gas	-	8,272,804	8,272,804
37	Affiliate Billings, Electric	-	26,139,860	26,139,860
38	Affiliate Billings Total	-	34,412,664	34,412,664
39	Total Labor Stats	291,056,708	233,114,626	524,171,334

SOUTHERN CALIFORNIA GAS COMPANY
Allocation of Clearing Accounts & Labor Overheads to Capital
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case

Line	Pool	% Capital	Total OH Loaded (2016 \$)	PCAT Capital (2016 \$)	PCAT O&M and Other ¹ (2016 \$)
		(D) = A / C	(C) = A + B	(A)	(B)
2	Warehousing	96.2%	5,489,420	5,282,128	207,292
3	Purchasing	59.4%	7,067,441	4,194,891	2,872,551
4	Shops	14.7%	2,324,237	342,129	1,982,109
5	Exempt Material - MPM ²	91.3%	1,011,308	923,819	87,489
6	Small Tools	14.7%	10,550,737	1,549,707	9,001,029
7	Variable Pay (ICP)	39.4%	75,810,316	29,860,782	45,949,534
8	PLPD	26.1%	20,855,512	5,435,244	15,420,268
9	Workers' Compensation	27.5%	10,297,994	2,829,257	7,468,737
10	Employee Benefits	27.5%	123,590,224	33,940,618	89,649,606
11	Pension & PBOP	27.9%	50,580,186	14,087,979	36,492,206

Footnotes

¹ Other includes Refundable, Special Billable and Affiliate Billing costs.

² Only Exempt Material - MPM is included for reassignment; Pipe Fittings derivation is handled separately.

SOUTHERN CALIFORNIA GAS COMPANY
Fleet Reassignments to Capital
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case

Line	Activity	% Capital	Total Fleet (2016 \$)	PCAT Capital (2016 \$)	PCAT Clearing (2016 \$)	PCAT O&M and Other ¹ (2016 \$)
1		(E) = A / D	(D) = A + B + C	(A)	(B)	(C)
2	Directly Assigned		38,373,524	6,749,663	453,564	31,170,297
3	Reassigned Fleet ²		-	480,600	(453,564)	(27,035)
4						
5	Summary Total	18.8%	38,373,524	7,230,263	-	31,143,261

Footnotes

¹ Other includes Refundable, Special Billable and Affiliate Billing costs.

² Clearing costs were reassigned from investigating allocations from overhead pools.

SOUTHERN CALIFORNIA GAS COMPANY
Derivation of 2016 Percentages of Reassignment to Capital
FERC Account: 892.4
Test Year 2019 General Rate Case

Line	Descriptions	(2013 - 2016 \$) ¹
1	Field Work Costs	
2		
3	Costs applicable to Construction Jobs	136,537,489 (A)
4		
5	Costs applicable to O&M	79,260,922 (B)
6		
7	Total Field Work Costs	<u>215,798,411</u> (C) = A + B
8		
9	Pipe Fitting Reassignment to Capital Rate	63.3% (D) = A / C

Notes:

Data provided by Business Planning & Budgets/Gas Operations Department.

Footnotes

¹ Field work costs represent a 4-year historical cost for applicable work. The length of historical cost to include matches the length of the GRC cycle.

SOUTHERN CALIFORNIA GAS COMPANY
Reassignment of A&G Expenses to Capital
Costs Incurred January 1, 2016 Through December 31, 2016
Test Year 2019 General Rate Case

Line	Company	A&G Costs Allocated to Capital Jobs (2016 \$)	Total A&G Costs Subject to Capitalization (2016 \$)	GRC A&G Reassignment to Capital Rate
		(A)	(B)	(C) = A / B
1				
2	SCG	6,575,138	114,670,840	
3	Sempra Energy	6,031,467	52,764,708	
4	SDG&E	1,829,471	67,091,235	
5				
6	Summary Total	14,436,076	234,526,783	6.2%

Notes:

(B) Costs subject to capitalization include FERC 920,921,923

**SoCalGas/SDG&E
2019 GRC - APP
Supplemental Tax Workpapers**

SOCALGAS
Repair Reductions Amortization Schedule

TCJA & CoC	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Repair Deductions Rate Base Adjustment (2016 - 2038) ¹	(37,958)	(36,233)	(34,508)	(32,782)	(31,057)	(29,331)	(27,606)	(25,881)	(24,155)	(22,430)	(20,705)	(18,979)
Rate Base Adjustment as revised to reflect TCJA & updated CoC	(14,300)	(13,650)	(13,000)	(12,350)	(11,700)	(11,050)	(10,400)	(9,750)	(9,100)	(8,450)	(7,800)	(7,150)
Increase to Rate Base from TCJA & CoC impact	(23,659)	(22,583)	(21,508)	(20,432)	(19,357)	(18,282)	(17,206)	(16,131)	(15,055)	(13,980)	(12,905)	(11,829)

¹ D.16-06-054, p. 192 and Appendix B

**SoCalGas/SDG&E
2019 GRC - APP
Supplemental Tax Workpapers**

SOCALGAS
Repair Reductions Amortization Schedule

TCJA & CoC	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Total
Repair Deductions Rate Base Adjustment (2016 - 2038) ¹	(17,254)	(15,528)	(13,803)	(12,078)	(10,352)	(8,627)	(6,902)	(5,176)	(3,451)	(1,725)	(0)	0
Rate Base Adjustment as revised to reflect TCJA & updated CoC	(6,500)	(5,850)	(5,200)	(4,550)	(3,900)	(3,250)	(2,600)	(1,950)	(1,300)	(650)	(0)	0
Increase to Rate Base from TCJA & CoC impact	(10,754)	(9,679)	(8,603)	(7,528)	(6,452)	(5,377)	(4,302)	(3,226)	(2,151)	(1,075)	0	0

¹ D.16-06-054, p. 192 and Appendix B

**SoCalGas/SDG&E
2019 GRC - APP
Supplemental Tax Workpapers**

SAN DIEGO GAS & ELECTRIC COMPANY
Repair Reductions Amortization Schedule

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Repair Deductions Rate Base Adjustment (2016 - 2042) ¹	(54,952)	(52,838)	(50,725)	(48,611)	(46,497)	(44,384)	(42,270)	(40,157)	(38,043)	(35,930)	(33,816)	(31,703)	(29,589)	(27,476)
Rate Base Adjustment as revised to reflect TCJA & updated CoC	(42,484)	(40,850)	(39,216)	(37,582)	(35,948)	(34,314)	(32,680)	(31,046)	(29,412)	(27,778)	(26,144)	(24,510)	(22,876)	(21,242)
Increase to Rate Base from TCJA & CoC impact	(12,467)	(11,988)	(11,508)	(11,029)	(10,549)	(10,070)	(9,590)	(9,111)	(8,631)	(8,152)	(7,672)	(7,193)	(6,713)	(6,234)

¹ D.16-06-054, p. 192 and Appendix B

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SAN DIEGO GAS & ELECTRIC COMPANY
Repair Reductions Amortization Schedule

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Repair Deductions Rate Base Adjustment (2016 - 2042) ¹	(25,362)	(23,249)	(21,135)	(19,022)	(16,908)	(14,795)	(12,681)	(10,568)	(8,454)	(6,341)	(4,227)	(2,114)	0
Rate Base Adjustment as revised to reflect TCJA & updated CoC	(19,608)	(17,974)	(16,340)	(14,706)	(13,072)	(11,438)	(9,804)	(8,170)	(6,536)	(4,902)	(3,268)	(1,634)	(0)
Increase to Rate Base from TCJA & CoC impact	(5,754)	(5,275)	(4,795)	(4,316)	(3,836)	(3,357)	(2,877)	(2,398)	(1,918)	(1,439)	(959)	(480)	0

¹ D.16-06-054, p. 192 and Appendix B

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**Sempra Utilities 2016 GRC, Appendix B
Revenue Requirement Impact of Rate Base Reduction**

Section 2

Southern California Gas

(in \$000s)

Total Revenue Requirement Impact 2016-2038 (Nominal \$):	(90,086)
Net Present Value of Revenue Requirement Impact (2016 \$):	(50,361)

Total Rate Base Reduction

\$ 37,958

Wt Cost of Capital (Rate of Return on RB)

8.02%

Income Tax Gross up

1.68765

FF&U NTG

1.01737

NTG Multiplier (adjusting for Taxes & FFU)

1.71697

Federal & State Tax Rate

40.746%

Uncollectible Rate

0.298%

Franchise Fee Rate

1.414%

	Capital Ratio	Cost	Weighted	Gross Up for Taxes & FFU
Long Term Debt	45.60%	5.77%	2.63%	2.68%
Preferred Stock	2.40%	6.00%	0.14%	0.25%
Common Equity	52.00%	10.10%	5.25%	9.02%
Total	100.00%		-8.03%	11.94% ^a

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Rate Base	b (37,958)	(36,233)	(34,508)	(32,782)	(31,057)	(29,331)	(27,606)	(25,881)	(24,155)	(22,430)	(20,705)	(18,979)
Depreciation	c	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)

Revenue Requirement Calculations (Bottoms Up)

Return on Ratebase, after Gross Up	a*b	(4,533)	(4,327)	(4,121)	(3,915)	(3,709)	(3,503)	(3,297)	(3,091)	(2,885)	(2,678)	(2,472)	(2,266)
Depreciation Expense	c		(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)
Revenue Requirement (Nominal)	(a*b)+c	(4,533)	(6,052)	(5,846)	(5,640)	(5,434)	(5,228)	(5,022)	(4,816)	(4,610)	(4,404)	(4,198)	(3,992)

Net Present Value Calculations*

Time Period	0	1	2	3	4	5	6	7	8	9	10	11
Rev Req in 2016\$	(4,533)	(5,603)	(5,010)	(4,475)	(3,991)	(3,555)	(3,161)	(2,806)	(2,487)	(2,199)	(1,941)	(1,709)
Net Present Value	(50,361)											

* Discount Rate used is the Cost of Capital, 8.02%.

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**Sempra Utilities 2016 GRC, Appendix B
Revenue Requirement Impact of Rate Base Reductio
Section 2**

Southern California Gas

(in \$000s)

Total Rate Base Reduction

Wt Cost of Capital (Rate of Return on RB)

Income Tax Gross up

FF&U NTG

NTG Multiplier (adjusting for Taxes & FFU)

Federal & State Tax Rate

Uncollectible Rate

Franchise Fee Rate

		2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Total
Rate Base	b	(17,254)	(15,528)	(13,803)	(12,078)	(10,352)	(8,627)	(6,902)	(5,176)	(3,451)	(1,725)	0	-
Depreciation	c	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(37,958)

Revenue Requirement Calculations (Bottoms Up)

Return on Ratebase, after Gross Up	a*b	(2,060)	(1,854)	(1,648)	(1,442)	(1,236)	(1,030)	(824)	(618)	(412)	(206)	0	(52,127)
Depreciation Expense	c	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(1,725)	(37,958)
Revenue Requirement (Nominal)	(a*b)+c	(3,786)	(3,580)	(3,374)	(3,168)	(2,962)	(2,756)	(2,550)	(2,343)	(2,137)	(1,931)	(1,725)	(90,086)

Net Present Value Calculations*

Time Period		12	13	14	15	16	17	18	19	20	21	22	
Rev Req in 2016\$		(1,500)	(1,313)	(1,146)	(996)	(862)	(742)	(636)	(541)	(457)	(382)	(316)	(50,361)
Net Present Value													

* Discount Rate used is the Cost of Capital, 8.02%.

**SoCalGas/SDG&E
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Sempra Utilities 2016 GRC, Appendix B

NPV Calculations - Southern California Gas (2012-2014 assets)

Section 6

SoCalGas 2016 GRC

	Vintage of Plant Subject to New Repair Deduction			Vintage of Plant Subject to New Repair Deduction			Vintage of Plant Subject to New Repair Deduction			Vintage of Plant Subject to New Repair Deduction						
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	Total			
	Actual	Actual	Forecast	Actual	Actual	Forecast	Actual	Actual	Forecast	Actual	Actual	Forecast				
Actual and forecasted Repairs deduction	(111,389)	(99,507)	(92,769)													
Foregone Percentage Repair Allowance Deduction	15,054	15,054	15,054													
Incremental Repairs Deduction	(96,335)	(84,453)	(77,715)													
Reduced Federal Tax	(33,717)	(29,559)	(27,200)	13,276	8,593	4,853										
Total			(90,476)													
Incremental Foregone Tax Depreciation				Book Depreciation Rate per SoCal			ADIT for year					Cumulative ADIT mid-year				
	2012	(48,168)		2012	3.94%	(3,793)	2012	(16,374)				2012	(8,187)	(8,187)		
	2013	(2,408)	(42,227)	2013	4.07%	(3,793)	(3,437)	(14,315)				2013	(16,511)	(7,158)	(23,669)	
	2014	(4,576)	(2,111)	(38,858)	2014	(3,793)	(3,437)	(3,235)	(114)	(201)	(13,148)	2014	(16,705)	(14,416)	(6,574)	(37,695)
	2015	(4,118)	(4,012)	(1,943)	2015	(3,793)	(3,437)	(3,235)	29	(61)	(160)	2015	(16,747)	(14,547)	(13,228)	(44,522)
	2016	(3,709)	(3,610)	(3,691)	2016	(3,793)	(3,437)	(3,235)	159	65	(31)	2016	(16,653)	(14,545)	(13,323)	(44,520)
	2017	(3,338)	(3,251)	(3,322)	2017	(3,793)	(3,437)	(3,235)	277	179	85	2017	(16,435)	(14,423)	(13,296)	(44,153)
	2018	(3,001)	(2,926)	(2,992)	2018	(3,793)	(3,437)	(3,235)	333	282	190	2018	(16,130)	(14,192)	(13,158)	(43,480)
	2019	(2,842)	(2,631)	(2,693)	2019	(3,793)	(3,437)	(3,235)	333	331	285	2019	(15,797)	(13,886)	(12,921)	(42,603)
	2020	(2,842)	(2,491)	(2,421)	2020	(3,793)	(3,437)	(3,235)	331	331	330	2020	(15,465)	(13,555)	(12,614)	(41,633)
	2021	(2,847)	(2,491)	(2,293)	2021	(3,793)	(3,437)	(3,235)	333	329	330	2021	(15,133)	(13,224)	(12,284)	(40,641)
	2022	(2,842)	(2,496)	(2,293)	2022	(3,793)	(3,437)	(3,235)	331	331	328	2022	(14,800)	(12,894)	(11,955)	(39,649)
	2023	(2,847)	(2,491)	(2,296)	2023	(3,793)	(3,437)	(3,235)	333	329	330	2023	(14,468)	(12,564)	(11,625)	(38,658)
	2024	(2,842)	(2,496)	(2,293)	2024	(3,793)	(3,437)	(3,235)	331	331	328	2024	(14,136)	(12,234)	(11,296)	(37,666)
	2025	(2,847)	(2,491)	(2,296)	2025	(3,793)	(3,437)	(3,235)	333	329	330	2025	(13,804)	(11,904)	(10,967)	(36,675)
	2026	(2,842)	(2,496)	(2,293)	2026	(3,793)	(3,437)	(3,235)	331	331	328	2026	(13,472)	(11,573)	(10,638)	(35,683)
	2027	(2,847)	(2,491)	(2,296)	2027	(3,793)	(3,437)	(3,235)	830	329	330	2027	(12,892)	(11,243)	(10,309)	(34,443)
	2028	(1,421)	(2,496)	(2,293)	2028	(3,793)	(3,437)	(3,235)	1,328	767	328	2028	(11,813)	(10,695)	(9,980)	(32,487)
	2029		(1,246)	(2,296)	2029	(3,793)	(3,437)	(3,235)	1,328	1,203	731	2029	(10,485)	(9,710)	(9,450)	(29,645)
	2030			(1,146)	2030	(3,793)	(3,437)	(3,235)	1,328	1,203	1,132	2030	(9,158)	(8,507)	(8,518)	(26,183)
	2031				2031	(3,793)	(3,437)	(3,235)	1,328	1,203	1,132	2031	(7,830)	(7,304)	(7,386)	(22,520)
					2032	(3,793)	(3,437)	(3,235)	1,328	1,203	1,132	2032	(6,502)	(6,101)	(6,254)	(18,857)
					2033	(3,793)	(3,437)	(3,235)	1,328	1,203	1,132	2033	(5,175)	(4,898)	(5,121)	(15,194)
					2034	(3,793)	(3,437)	(3,235)	1,328	1,203	1,132	2034	(3,847)	(3,695)	(3,989)	(11,532)
					2035	(3,793)	(3,437)	(3,235)	1,328	1,203	1,132	2035	(2,520)	(2,492)	(2,857)	(7,869)
					2036	(3,793)	(3,437)	(3,235)	1,328	1,203	1,132	2036	(1,192)	(1,289)	(1,725)	(4,206)
					2037	(1,510)	(1,965)	(3,235)	529	688	1,132	2037	(264)	(344)	(592)	(1,201)
					2038			(75)			26	2038			(13)	(13)

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Section 481A ADIT *	Effect on Ratepayers	Rate of Return 11.72%			Taxable book depreciation		
		Foregone ADIT	Section 481a	Total ADIT	depreciation	Tax with gross-up	Impact
61,019	2012	(960)	7,151	6,192	3,793	(2,610)	3,582
118,955	2013	(2,774)	13,942	11,168	7,230	(4,975)	6,192
112,788	2014	(4,418)	13,219	8,801	10,465	(7,202)	1,599
106,622	2015	(5,218)	12,496	7,278	10,465	(7,202)	77
100,455	2016	(5,218)	11,773	6,556	10,465	(7,202)	(646)
94,288	2017	(5,175)	11,051	5,876	10,465	(7,202)	(1,326)
88,122	2018	(5,096)	10,328	5,232	10,465	(7,202)	(1,970)
81,955	2019	(4,993)	9,605	4,612	10,465	(7,202)	(2,590)
75,788	2020	(4,879)	8,882	4,003	10,465	(7,202)	(3,199)
69,622	2021	(4,763)	8,160	3,397	10,465	(7,202)	(3,805)
63,455	2022	(4,647)	7,437	2,790	10,465	(7,202)	(4,412)
57,289	2023	(4,531)	6,714	2,184	10,465	(7,202)	(5,018)
51,122	2024	(4,414)	5,991	1,577	10,465	(7,202)	(5,625)
44,955	2025	(4,298)	5,269	970	10,465	(7,202)	(6,231)
38,789	2026	(4,182)	4,546	364	10,465	(7,202)	(6,838)
32,622	2027	(4,037)	3,823	(213)	10,465	(7,202)	(7,415)
26,455	2028	(3,807)	3,101	(707)	10,465	(7,202)	(7,909)
20,289	2029	(3,474)	2,378	(1,097)	10,465	(7,202)	(8,298)
14,122	2030	(3,069)	1,655	(1,414)	10,465	(7,202)	(8,615)
7,955	2031	(2,639)	932	(1,707)	10,465	(7,202)	(8,909)
1,789	2032	(2,210)	210	(2,000)	10,465	(7,202)	(9,202)
	2033	(1,781)	-	(1,781)	10,465	(7,202)	(8,982)
	2034	(1,352)	-	(1,352)	10,465	(7,202)	(8,553)
	2035	(922)	-	(922)	10,465	(7,202)	(8,124)
	2036	(493)	-	(493)	10,465	(7,202)	(7,695)
	2037	(141)	-	(141)	6,710	(4,618)	(4,758)
	2038	(2)	-	(2)	75	(52)	(53)
	Nominal \$ 2	(76,123)	101,855	25,733		(155,903)	(130,171)
	NPV 8.02% :	(43,659)	69,045	25,386		(75,747)	(50,361)

**SoCalGas/SDG&E
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**Sempra Utilities 2016 GRC, Appendix B
Revenue Requirement Impact of Rate Base Reduction
Section 4**

San Diego Gas & Electric - Electric

(in \$000s)

Total Revenue Requirement Impact 2016-2042 (Nominal \$):	(144,140)
Net Present Value of Revenue Requirement Impact (2016 \$):	(75,972)

Total Rate Base Reduction **\$ 54,952**

Wt Cost of Capital (Rate of Return on RB)	7.79%
Income Tax Gross up	1.68765
FF&U NTG - Electric	1.03729
NTG Multiplier (adjusting for Taxes & FFU) - Electric	1.75059
Federal & State Tax Rate	40.746%
Uncollectible Rate - Electric	0.174%
Franchise Fee Rate - Electric	3.427%

	Capital Ratio	Cost	Weighted	Gross Up for Taxes & FFU
Long Term Debt	45.25%	5.00%	2.26%	2.35%
Preferred Stock	2.75%	6.22%	0.17%	0.30%
Common Equity	52.00%	10.30%	5.36%	9.38%
Total	100.00%		7.79%	12.02% ^a

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Rate Base	b	(54,952)	(52,838)	(50,725)	(48,611)	(46,497)	(44,384)	(42,270)	(40,157)	(38,043)	(35,930)	(33,816)	(31,703)	(29,589)	(27,476)
Depreciation	c		(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)
Revenue Requirement Calculations (Bottoms Up)															
Return on Ratebase, after Gross Up	a*b	(6,607)	(6,352)	(6,098)	(5,844)	(5,590)	(5,336)	(5,082)	(4,828)	(4,574)	(4,320)	(4,066)	(3,811)	(3,557)	(3,303)
Depreciation Expense	c		(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)
Revenue Requirement (Nominal)	(a*b)+c	(6,607)	(8,466)	(8,212)	(7,958)	(7,704)	(7,450)	(7,195)	(6,941)	(6,687)	(6,433)	(6,179)	(5,925)	(5,671)	(5,417)
Net Present Value Calculations*															
Rev Req in 2016\$		(6,607)	(7,854)	(7,068)	(6,354)	(5,707)	(5,120)	(4,588)	(4,106)	(3,670)	(3,275)	(2,918)	(2,596)	(2,305)	(2,043)
Net Present Value		(75,972)													

* Discount Rate used is the Cost of Capital, 7.79%.

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**Sempra Utilities 2016 GRC, Appendix B
Revenue Requirement Impact of Rate Base Red
Section 4**

San Diego Gas & Electric - Electric

(in \$000s)

Total Rate Base Reduction

Wt Cost of Capital (Rate of Return on RB)

Income Tax Gross up

FF&U NTG - Electric

NTG Multiplier (adjusting for Taxes & FFU) - Electric

Federal & State Tax Rate

Uncollectible Rate - Electric

Franchise Fee Rate - Electric

		2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Total
Rate Base	b	(25,362)	(23,249)	(21,135)	(19,022)	(16,908)	(14,795)	(12,681)	(10,568)	(8,454)	(6,341)	(4,227)	(2,114)	0	-
Depreciation	c	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(54,952)
Revenue Requirement Calculations (Bottoms Up)															
Return on Ratebase, after Gross Up	a*b	(3,049)	(2,795)	(2,541)	(2,287)	(2,033)	(1,779)	(1,525)	(1,270)	(1,016)	(762)	(508)	(254)	0	(89,188)
Depreciation Expense	c	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(2,114)	(54,952)
Revenue Requirement (Nominal)	(a*b)+c	(5,163)	(4,909)	(4,654)	(4,400)	(4,146)	(3,892)	(3,638)	(3,384)	(3,130)	(2,876)	(2,622)	(2,368)	(2,114)	(144,140)
Net Present Value Calculations*															
Rev Req in 2016\$		(1,806)	(1,593)	(1,402)	(1,229)	(1,075)	(936)	(812)	(700)	(601)	(512)	(433)	(363)	(301)	(75,972)
Net Present Value															

* Discount Rate used is the Cost of Capital, 7.79%.

**SoCalGas/SDG&E
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**Sempra Utilities 2016 GRC, Appendix B
NPV Cost Calculations - San Diego Gas & Electric (2011-2014 assets)
Section 7**

	Vintage of Plant Subject to New Repair Deduction				Vintage of Plant Subject to New Repair Deduction				Vintage of Plant Subject to New Repair Deduction					
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014		
	Actual	Actual	Actual	Forecast	Actual	Actual	Actual	Forecast	Actual	Actual	Actual	Forecast		
Actual and forecasted Repairs deduction	(71,530)	(65,616)	(90,911)	(70,240)										
Foregone Percentage Repair Allowance Deduction	9,369	9,369	9,369	9,369										
Incremental Repairs Deduction	(62,161)	(56,247)	(81,542)	(60,871)										
Reduced Federal Tax Total	(21,756)	(19,686)	(28,540)	(21,305)								(91,287)		
Incremental Foregone Tax Depreciation					Book Depreciation Rate per SDG&E					ADIT for year			Cumulative ADIT mid-year	
2011	(62,161)				2011	3.45%	3.45%	3.45%	3.45%	2011	(21,006)	-	-	2011
2012	-	(29,529.68)			2012	(2,145)	(1,941)			2012	751	(9,656)	-	2012
2013	-	(1,336)	(40,771)		2013	(2,145)	(1,941)	(2,813)		2013	751	212	(13,285)	2013
2014	-	(2,538)	(2,039)	(30,436)	2014	(2,145)	(1,941)	(2,813)	(2,100)	2014	751	(209)	271	(9,917)
2015	-	(2,284)	(3,873)	(1,522)	2015	(2,145)	(1,941)	(2,813)	(2,100)	2015	751	(120)	(371)	202
2016	-	(2,057)	(3,486)	(2,891)	2016	(2,145)	(1,941)	(2,813)	(2,100)	2016	751	(41)	(235)	(277)
2017	-	(1,852)	(3,139)	(2,602)	2017	(2,145)	(1,941)	(2,813)	(2,100)	2017	751	31	(114)	(176)
2018	-	(1,664)	(2,825)	(2,344)	2018	(2,145)	(1,941)	(2,813)	(2,100)	2018	751	97	(4)	(85)
2019	-	(1,576)	(2,540)	(2,109)	2019	(2,145)	(1,941)	(2,813)	(2,100)	2019	751	127	96	(3)
2020	-	(1,576)	(2,405)	(1,896)	2020	(2,145)	(1,941)	(2,813)	(2,100)	2020	751	127	143	71
2021	-	(1,579)	(2,405)	(1,796)	2021	(2,145)	(1,941)	(2,813)	(2,100)	2021	751	127	143	107
2022	-	(1,576)	(2,410)	(1,796)	2022	(2,145)	(1,941)	(2,813)	(2,100)	2022	751	127	141	107
2023	-	(1,579)	(2,405)	(1,799)	2023	(2,145)	(1,941)	(2,813)	(2,100)	2023	751	127	143	105
2024	-	(1,576)	(2,410)	(1,796)	2024	(2,145)	(1,941)	(2,813)	(2,100)	2024	751	127	141	107
2025	-	(1,579)	(2,405)	(1,799)	2025	(2,145)	(1,941)	(2,813)	(2,100)	2025	751	127	143	105
2026	-	(1,576)	(2,410)	(1,796)	2026	(2,145)	(1,941)	(2,813)	(2,100)	2026	751	127	141	107
2027	-	(1,579)	(2,405)	(1,799)	2027	(2,145)	(1,941)	(2,813)	(2,100)	2027	751	127	143	105
2028		(788)	(2,410)	(1,796)	2028	(2,145)	(1,941)	(2,813)	(2,100)	2028	751	403	141	107
2029			(1,203)	(1,799)	2029	(2,145)	(1,941)	(2,813)	(2,100)	2029	751	679	564	105
2030				(898)	2030	(2,145)	(1,941)	(2,813)	(2,100)	2030	751	679	985	421
2031					2031	(2,145)	(1,941)	(2,813)	(2,100)	2031	751	679	985	735
					2032	(2,145)	(1,941)	(2,813)	(2,100)	2032	751	679	985	735
					2033	(2,145)	(1,941)	(2,813)	(2,100)	2033	751	679	985	735
					2034	(2,145)	(1,941)	(2,813)	(2,100)	2034	751	679	985	735
					2035	(2,145)	(1,941)	(2,813)	(2,100)	2035	751	679	985	735
					2036	(2,145)	(1,941)	(2,813)	(2,100)	2036	751	679	985	735
					2037	(2,145)	(1,941)	(2,813)	(2,100)	2037	751	679	985	735
					2038	(2,145)	(1,941)	(2,813)	(2,100)	2038	751	679	985	735
					2039	(2,145)	(1,941)	(2,813)	(2,100)	2039	751	679	985	735
					2040		(1,941)	(2,813)	(2,100)	2040	-	679	985	735
					2041			(2,813)	(2,100)	2041	-	-	985	735
					2042				(2,100)	2042	-	-	-	735
					2043					2043	-	-	-	-

**SoCalGas/SDG&E
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**Sempra Utilities 2016 GRC, Appendix B
Revenue Requirement Impact of Rate Base Reduction**

Section 2 -- Revised to reflect Tax Cuts and Jobs Act

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= Changes to original file to reflect new tax rate beginning in 2018

Southern California Gas

(in \$000s)

Total Revenue Requirement Impact 2016-2038 (Nominal \$):	(30,731)
Net Present Value of Revenue Requirement Impact (2016 \$):	(17,865)

Total Rate Base Reduction

	\$ 14,300		2016 - 2017						
	2016 - 2017	2018-2038		Capital Ratio	Cost	Weighted	Gross Up for Taxes & FFU	Capital Ratio	Cost
Wt Cost of Capital (Rate of Return on RB)	8.02%	7.34%	Long Term Debt	45.60%	5.77%	2.63%	2.68%	45.60%	4.33%
Income Tax Gross up	1.68765	1.38857	Preferred Stock	2.40%	6.00%	0.14%	0.25%	2.40%	6.00%
FF&U NTG	1.01737	1.01712	Common Equity	52.00%	10.10%	5.25%	9.02%	52.00%	10.05%
NTG Multiplier (adjusting for Taxes & FFU)	1.71697	1.41235	Total	100.00%		-8.03%	11.94%	100.00%	
Federal & State Tax Rate	40.746%	27.984%							
Uncollectible Rate	0.298%								
Franchise Fee Rate	1.414%								

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Rate Base	b	(14,300)	(13,650)	(13,000)	(12,350)	(11,700)	(11,050)	(10,400)	(9,750)	(9,100)	(8,450)	(7,800)	(7,150)
Depreciation	c		(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)

Revenue Requirement Calculations (Bottoms Up)

Return on Ratebase, after Gross Up	a*b	(1,708)	(1,630)	(1,247)	(1,185)	(1,122)	(1,060)	(998)	(935)	(873)	(811)	(748)	(686)
Depreciation Expense	c		(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)
Revenue Requirement (Nominal)	(a*b)+c	(1,708)	(2,280)	(1,897)	(1,835)	(1,772)	(1,710)	(1,648)	(1,585)	(1,523)	(1,461)	(1,398)	(1,336)

Net Present Value Calculations*

Time Period	0	1	2	3	4	5	6	7	8	9	10	11
Rev Req in 2016\$	(1,708)	(2,111)	(1,646)	(1,483)	(1,335)	(1,200)	(1,077)	(966)	(864)	(772)	(689)	(613)
Net Present Value	(17,865)											

* Discount Rate used is the Cost of Capital, 8.02%.

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Revenue Requirement Impact of Rate Base Reductio
Section 2 -- **Revised to reflect Tax Cuts and Jobs Act**
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Southern California Gas
(in \$000s)

Total Rate Base Reduction

2018 - 2038

	Weighted	Gross Up 2018-2038	
Wt Cost of Capital (Rate of Return on RB)	1.97%	2.01%	
Income Tax Gross up	0.14%	0.20%	
FF&U NTG	5.23%	7.38%	
NTG Multiplier (adjusting for Taxes & FFU)	-7.34%	9.59%	a

Federal & State Tax Rate
Uncollectible Rate
Franchise Fee Rate

		2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	Total
Rate Base	b	(6,500)	(5,850)	(5,200)	(4,550)	(3,900)	(3,250)	(2,600)	(1,950)	(1,300)	(650)	(0)	-
Depreciation	c	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(14,300)

Revenue Requirement Calculations (Bottoms Up)

Return on Ratebase, after Gross Up	a*b	(624)	(561)	(499)	(436)	(374)	(312)	(249)	(187)	(125)	(62)	(0)	(16,431)
Depreciation Expense	c	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(650)	(14,300)
Revenue Requirement (Nominal)	(a*b)+c	(1,274)	(1,211)	(1,149)	(1,086)	(1,024)	(962)	(899)	(837)	(775)	(712)	(650)	(30,731)

Net Present Value Calculations*

Time Period		12	13	14	15	16	17	18	19	20	21	22	
Rev Req in 2016\$		(544)	(482)	(426)	(375)	(330)	(288)	(251)	(218)	(188)	(161)	(137)	(17,865)
Net Present Value													

* Discount Rate used is the Cost of Capital, 8.02%.

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Sempra Utilities 2016 GRC, Appendix B
NPV Calculations - Southern California Gas (2012-2014 assets)
Section 6 -- Revised to reflect Tax Cuts and Jobs Act

	Vintage of Plant Subject to New Repair Deduction			Vintage of Plant Subject to New Repair Deduction			Vintage of Plant Subject to New Repair Deduction			Vintage of Plant Subject to New Repair Deduction							
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014	Total				
	Actual	Actual	Forecast	Actual	Actual	Forecast	Actual	Actual	Forecast	Actual	Actual	Forecast					
Actual and forecasted Repairs deduction	(111,389)	(99,507)	(92,769)														
Foregone Percentage Repair Allowance Deduction	15,054	15,054	15,054														
Incremental Repairs Deduction	(96,335)	(84,453)	(77,715)														
Reduced Federal Tax	(33,717)	(29,559)	(27,200)	13,276	8,593	4,853											
Total			(90,476)														
Incremental Foregone Tax Depreciation				Book Depreciation Rate per SoCal			ADIT for year						Cumulative ADIT mid-year				
				3.94%	4.07%	4.16%											
2012	(48,168)			2012	(3,793)		2012	(16,374)					2012	(8,187)	(8,187)		
2013	(2,408)	(42,227)		2013	(3,793)	(3,437)	2013	(274)	(14,315)				2013	(16,511)	(7,158)	(23,669)	
2014	(4,576)	(2,111)	(38,858)	2014	(3,793)	(3,437)	(3,235)	2014	(114)	(201)	(13,148)		2014	(16,705)	(14,416)	(6,574)	(37,695)
2015	(4,118)	(4,012)	(1,943)	2015	(3,793)	(3,437)	(3,235)	2015	29	(61)	(160)		2015	(16,747)	(14,547)	(13,228)	(44,522)
2016	(3,709)	(3,610)	(3,691)	2016	(3,793)	(3,437)	(3,235)	2016	159	65	(31)		2016	(16,653)	(14,545)	(13,323)	(44,520)
2017	(3,338)	(3,251)	(3,322)	2017	(3,793)	(3,437)	(3,235)	2017	277	179	85		2017	(16,435)	(14,423)	(13,296)	(44,153)
2018	(3,001)	(2,926)	(2,992)	2018	(3,793)	(3,437)	(3,235)	2018	200	169	114		2018	(16,196)	(14,249)	(13,196)	(43,641)
2019	(2,842)	(2,631)	(2,693)	2019	(3,793)	(3,437)	(3,235)	2019	200	199	171		2019	(15,996)	(14,065)	(13,054)	(43,115)
2020	(2,842)	(2,491)	(2,421)	2020	(3,793)	(3,437)	(3,235)	2020	199	199	198		2020	(15,797)	(13,866)	(12,869)	(42,533)
2021	(2,847)	(2,491)	(2,293)	2021	(3,793)	(3,437)	(3,235)	2021	200	198	198		2021	(15,598)	(13,668)	(12,671)	(41,937)
2022	(2,842)	(2,496)	(2,293)	2022	(3,793)	(3,437)	(3,235)	2022	199	199	197		2022	(15,399)	(13,470)	(12,474)	(41,343)
2023	(2,847)	(2,491)	(2,296)	2023	(3,793)	(3,437)	(3,235)	2023	200	198	198		2023	(15,199)	(13,272)	(12,276)	(40,748)
2024	(2,842)	(2,496)	(2,293)	2024	(3,793)	(3,437)	(3,235)	2024	199	199	197		2024	(15,000)	(13,074)	(12,079)	(40,153)
2025	(2,847)	(2,491)	(2,296)	2025	(3,793)	(3,437)	(3,235)	2025	200	198	198		2025	(14,801)	(12,875)	(11,881)	(39,558)
2026	(2,842)	(2,496)	(2,293)	2026	(3,793)	(3,437)	(3,235)	2026	199	199	197		2026	(14,602)	(12,677)	(11,684)	(38,963)
2027	(2,847)	(2,491)	(2,296)	2027	(3,793)	(3,437)	(3,235)	2027	498	198	198		2027	(14,253)	(12,479)	(11,486)	(38,219)
2028	(1,421)	(2,496)	(2,293)	2028	(3,793)	(3,437)	(3,235)	2028	797	460	197		2028	(13,606)	(12,150)	(11,289)	(37,045)
2029		(1,246)	(2,296)	2029	(3,793)	(3,437)	(3,235)	2029	797	722	439		2029	(12,809)	(11,559)	(10,971)	(35,340)
2030			(1,146)	2030	(3,793)	(3,437)	(3,235)	2030	797	722	679		2030	(12,013)	(10,837)	(10,412)	(33,263)
2031				2031	(3,793)	(3,437)	(3,235)	2031	797	722	679		2031	(11,216)	(10,116)	(9,733)	(31,065)
				2032	(3,793)	(3,437)	(3,235)	2032	797	722	679		2032	(10,420)	(9,394)	(9,053)	(28,867)
				2033	(3,793)	(3,437)	(3,235)	2033	797	722	679		2033	(9,623)	(8,672)	(8,374)	(26,670)
				2034	(3,793)	(3,437)	(3,235)	2034	797	722	679		2034	(8,827)	(7,950)	(7,695)	(24,472)
				2035	(3,793)	(3,437)	(3,235)	2035	797	722	679		2035	(8,030)	(7,229)	(7,015)	(22,274)
				2036	(3,793)	(3,437)	(3,235)	2036	797	722	679		2036	(7,234)	(6,507)	(6,336)	(20,077)
				2037	(1,510)	(1,965)	(3,235)	2037	317	413	679		2037	(6,677)	(5,940)	(5,657)	(18,273)
				2038			(75)	2038	-	-	16		2038			(5,309)	(5,309)

New Federal tax rate (2018 -) 21%

**SoCalGas/SDG&E
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= Changes to original file to reflect new tax rate beginning in 2018

Combined
Federal & State
Tax Rate (2018 -
) 27.984%

Rate of Return 11.72% for 2016-2017; 9.427% for 2018 -

Taxable book depreciation

Section 481A ADIT *	Effect on Ratepayers	Foregone ADIT	Section 481a	Total ADIT	depreciation	Tax with gross-up	Impact
61,019	2012	(960)	7,151	6,192	3,793	(2,610)	3,582
118,955	2013	(2,774)	13,942	11,168	7,230	(4,975)	6,192
112,788	2014	(4,418)	13,219	8,801	10,465	(7,202)	1,599
106,622	2015	(5,218)	12,496	7,278	10,465	(7,202)	77
100,455	2016	(5,218)	11,773	6,556	10,465	(7,202)	(646)
94,288	2017	(5,175)	11,051	5,876	10,465	(7,202)	(1,326)
90,588	2018	(4,114)	8,540	4,426	10,465	(4,066)	359
86,888	2019	(4,064)	8,191	4,127	10,465	(4,066)	60
83,188	2020	(4,010)	7,842	3,833	10,465	(4,066)	(234)
79,488	2021	(3,953)	7,493	3,540	10,465	(4,066)	(527)
75,788	2022	(3,897)	7,145	3,247	10,465	(4,066)	(819)
72,088	2023	(3,841)	6,796	2,955	10,465	(4,066)	(1,112)
68,388	2024	(3,785)	6,447	2,662	10,465	(4,066)	(1,405)
64,689	2025	(3,729)	6,098	2,369	10,465	(4,066)	(1,697)
60,989	2026	(3,673)	5,749	2,076	10,465	(4,066)	(1,990)
57,289	2027	(3,603)	5,401	1,798	10,465	(4,066)	(2,269)
53,589	2028	(3,492)	5,052	1,560	10,465	(4,066)	(2,507)
49,889	2029	(3,331)	4,703	1,372	10,465	(4,066)	(2,695)
46,189	2030	(3,136)	4,354	1,219	10,465	(4,066)	(2,848)
42,489	2031	(2,928)	4,005	1,077	10,465	(4,066)	(2,990)
38,789	2032	(2,721)	3,657	935	10,465	(4,066)	(3,131)
35,089	2033	(2,514)	3,308	794	10,465	(4,066)	(3,273)
31,389	2034	(2,307)	2,959	652	10,465	(4,066)	(3,414)
27,689	2035	(2,100)	2,610	510	10,465	(4,066)	(3,556)
23,989	2036	(1,893)	2,261	369	10,465	(4,066)	(3,698)
20,289	2037	(1,723)	1,913	190	6,710	(2,607)	(2,417)
16,589	2038	(500)	1,564	1,063	75	(29)	1,034

Nominal \$ 2016-2038	(75,709)	128,912	53,203	(94,303)	(41,100)
NPV 8.02% 2016-2017					
NPV 7.34% 2018-2038	(47,319)	85,916	38,597	(56,462)	(17,865)

SCG/SDG&E/Tax/Exh No:SCG-37-WP-S/SDG&E-35-WP-S/Witness: R. Reeves

**SoCalGas/SDG&E
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SOCALGAS
Test Year 2019
Net-to-Gross Multiplier

Line No.	Description	Test Year 2019		
		Uncollectible and Franchise Fee Factor	State & Federal Tax Factor	Net-to-Gross Multiplier
1	Revenues	1.000000	1.000000	1.000000
2	Uncollectible Tax Rate	0.003160	0.000000	0.003160
3	Uncollectible Amount Applied	1.000000	1.000000	1.000000
4	Less: Uncollectible (Line 2 * Line 3)	0.003160	0.000000	0.003160
5	Subtotal (Line 3 - Line 4)	0.996840	1.000000	0.996840
6	Franchise Fees Tax Rate	0.013720	0.000000	0.013720
7	Franchise Fees Amount Applied (Line 5)	0.996840	1.000000	0.996840
8	Less: Franchise Fees (Line 6 * Line 7)	0.013677	0.000000	0.013677
9	Subtotal (Line 7 - Line 8)	0.983163	1.000000	0.983163
10	S.I.T. Rate		0.088400	0.088400
11	S.I.T. Amount Applied (Line 9)		1.000000	0.983163
12	Less: S.I.T. (Line 10 * Line 11)		0.088400	0.086912
13	Subtotal (Line 11 - Line 12)		0.911600	0.896252
14	F.I.T. Rate		0.210000	0.210000
15	F.I.T. Amount Applied (Line 13)		0.911600	0.896252
16	Less: F.I.T. (Line 14 * Line 15)		0.191436	0.188213
17	Net Operating Revenues (Line 15 - Line 16)		0.720164	0.708039
18	Uncollectible and Franchise Fee Factor (1 / Line 9)	1.017125		
19	State & Federal Tax Factor (1 / Line 17)		1.388573	
20	N-T-G Multiplier (1 / Line 17)			1.412352

= Changes to original file to reflect new tax rate beginning in 2018

**SoCalGas/SDG&E
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Sempra Utilities 2016 GRC

Revenue Requirement Impact of Rate Base Reduction

Section 4 -- Revised to reflect Tax Cuts and Jobs Act

= Changes to original file to reflect new tax rate beginning in 2018

San Diego Gas & Electric - Electric

(in \$000s)

Total Revenue Requirement Impact 2016-2042 (Nominal \$):	(102,099)
Net Present Value of Revenue Requirement Impact (2016 \$):	(54,639)

Total Rate Base Reduction

	\$ 42,484		2016 - 2017				2018 - 2042				
	2016 - 2017	2018-2042	Capital Ratio	Cost	Weighted	Gross Up for Taxes & FFU	Capital Ratio	Cost	Weighted	Gross Up	
Wt Cost of Capital (Rate of Return on RB)	7.790%	7.55%	Long Term Debt	45.25%	5.00%	2.26%	2.35%	45.25%	4.59%	2.08%	2.1
Income Tax Gross up	1.68765	1.38857	Preferred Stock	2.75%	6.22%	0.17%	0.30%	2.75%	6.22%	0.17%	0.2
FF&U NTG - Electric	1.03729	1.03750	Common Equity	52.00%	10.30%	5.36%	9.38%	52.00%	10.20%	5.30%	7.7
NTG Multiplier (adjusting for Taxes & FFU) - Electric	1.75059	1.44065	Total	100.00%		7.79%	12.02%	100.00%		7.55%	10.7
Federal & State Tax Rate	40.746%	27.98%									
Uncollectible Rate - Electric	0.174%										
Franchise Fee Rate - Electric	3.427%										

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Rate Base	b	(42,484)	(40,850)	(39,216)	(37,582)	(35,948)	(34,314)	(32,680)	(31,046)	(29,412)	(27,778)	(26,144)	(24,510)	(22,876)	(21,242)
Depreciation	c		(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)

Revenue Requirement Calculations (Bottoms Up)

Return on Ratebase, after Gross Up	a*b	(5,108)	(4,911)	(3,968)	(3,802)	(3,637)	(3,472)	(3,306)	(3,141)	(2,976)	(2,810)	(2,645)	(2,480)	(2,314)	(2,149)
Depreciation Expense	c		(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)
Revenue Requirement (Nominal)	(a*b)+c	(5,108)	(6,545)	(5,602)	(5,436)	(5,271)	(5,106)	(4,940)	(4,775)	(4,610)	(4,444)	(4,279)	(4,114)	(3,949)	(3,783)

Net Present Value Calculations*

Rev Req in 2016\$		(5,107.68)	(6,072.22)	(4,843)	(4,370)	(3,940)	(3,548)	(3,192)	(2,869)	(2,575)	(2,308)	(2,067)	(1,847)	(1,649)	(1,469)
Net Present Value		(54,639)													

* Discount Rate used is the Cost of Capital, 7.79%.

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**Sempra Utilities 2016 GRC
Revenue Requirement Impact of Rate Base Red
Section 4 -- Revised to reflect Tax Cuts and Job:**

San Diego Gas & Electric - Electric

(in \$000s)

Total Rate Base Reduction

	2018-2038	
Wt Cost of Capital (Rate of Return on RB)	5%	
Income Tax Gross up	5%	
FF&U NTG - Electric	2%	
NTG Multiplier (adjusting for Taxes & FFU) - Electric	1.2%	a

Federal & State Tax Rate
Uncollectible Rate - Electric
Franchise Fee Rate - Electric

		2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Total
Rate Base	b	(19,608)	(17,974)	(16,340)	(14,706)	(13,072)	(11,438)	(9,804)	(8,170)	(6,536)	(4,902)	(3,268)	(1,634)	(0)	-
Depreciation	c	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(42,484)

Revenue Requirement Calculations (Bottoms Up)

Return on Ratebase, after Gross Up	a*b	(1,984)	(1,819)	(1,653)	(1,488)	(1,323)	(1,157)	(992)	(827)	(661)	(496)	(331)	(165)	(0)	(59,615)
Depreciation Expense	c	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(1,634)	(42,484)
Revenue Requirement (Nominal)	(a*b)+c	(3,618)	(3,453)	(3,287)	(3,122)	(2,957)	(2,791)	(2,626)	(2,461)	(2,295)	(2,130)	(1,965)	(1,799)	(1,634)	(102,099)

Net Present Value Calculations*

Rev Req in 2016\$		(1,306)	(1,159)	(1,026)	(906)	(798)	(700)	(612)	(534)	(463)	(399)	(342)	(292)	(246)	(54,639)
Net Present Value															

* Discount Rate used is the Cost of Capital, 7.79%.

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Plant Subject to New Repair Deduction

2012 Actual 2013 Actual 2014 Forecast Total

 = Changes to original file to reflect new tax rate beginning in 2018

**Combined
Federal &
State Tax
Rate (2018 -)** 27.984%

Rate of Return 11.72% for 2016-2017; 9.675% for 2018 -

Taxable book depreciation

Total

				Section 481a ADIT	Effect on Ratepayers	Foregone ADIT	Section 481a	Total ADIT	depreciation	Tax with gross-up	Impact
-	-	-	(10,503)	43,077	2011	(1,231)	5,049	3,818	2,145	(1,476)	2,342
(4,828)	-	-	(25,459)	81,797	2012	(2,984)	9,587	6,603	4,085	(2,811)	3,792
(9,550)	(6,643)	-	(36,073)	77,441	2013	(4,228)	9,076	4,848	6,898	(4,747)	101
(9,549)	(13,150)	(4,959)	(46,787)	73,084	2014	(5,483)	8,565	3,082	8,998	(6,192)	(3,110)
(9,714)	(13,200)	(9,816)	(51,108)	68,728	2015	(5,990)	8,055	2,065	8,998	(6,192)	(4,127)
(9,795)	(13,503)	(9,853)	(50,779)	64,371	2016	(5,951)	7,544	1,593	8,998	(6,192)	(4,599)
(9,799)	(13,678)	(10,080)	(50,434)	60,015	2017	(5,911)	7,034	1,123	8,998	(6,192)	(5,069)
(9,755)	(13,736)	(10,193)	(49,961)	57,401	2018	(4,834)	5,554	720	8,998	(3,497)	(2,777)
(9,688)	(13,709)	(10,220)	(49,443)	54,787	2019	(4,784)	5,301	517	8,998	(3,497)	(2,979)
(9,611)	(13,637)	(10,199)	(48,824)	52,173	2020	(4,724)	5,048	324	8,998	(3,497)	(3,173)
(9,535)	(13,552)	(10,146)	(48,158)	49,559	2021	(4,659)	4,795	136	8,998	(3,497)	(3,361)
(9,459)	(13,466)	(10,082)	(47,483)	46,946	2022	(4,594)	4,542	(52)	8,998	(3,497)	(3,549)
(9,382)	(13,381)	(10,018)	(46,807)	44,332	2023	(4,529)	4,289	(240)	8,998	(3,497)	(3,736)
(9,306)	(13,296)	(9,955)	(46,132)	41,718	2024	(4,463)	4,036	(427)	8,998	(3,497)	(3,924)
(9,230)	(13,211)	(9,891)	(45,457)	39,104	2025	(4,398)	3,783	(615)	8,998	(3,497)	(4,111)
(9,154)	(13,126)	(9,828)	(44,781)	36,490	2026	(4,333)	3,530	(802)	8,998	(3,497)	(4,299)
(9,078)	(13,040)	(9,764)	(44,106)	33,876	2027	(4,267)	3,278	(990)	8,998	(3,497)	(4,486)
(8,919)	(12,955)	(9,701)	(43,348)	31,262	2028	(4,194)	3,025	(1,169)	8,998	(3,497)	(4,666)
(8,594)	(12,744)	(9,637)	(42,298)	28,648	2029	(4,092)	2,772	(1,321)	8,998	(3,497)	(4,817)
(8,186)	(12,279)	(9,479)	(40,817)	26,035	2030	(3,949)	2,519	(1,430)	8,998	(3,497)	(4,927)
(7,779)	(11,688)	(9,132)	(39,022)	23,421	2031	(3,775)	2,266	(1,509)	8,998	(3,497)	(5,006)
(7,371)	(11,098)	(8,691)	(37,132)	20,807	2032	(3,593)	2,013	(1,580)	8,998	(3,497)	(5,076)
(6,964)	(10,507)	(8,250)	(35,243)	18,193	2033	(3,410)	1,760	(1,650)	8,998	(3,497)	(5,146)
(6,556)	(9,916)	(7,809)	(33,353)	15,579	2034	(3,227)	1,507	(1,720)	8,998	(3,497)	(5,216)
(6,149)	(9,325)	(7,368)	(31,463)	12,965	2035	(3,044)	1,254	(1,790)	8,998	(3,497)	(5,286)
(5,741)	(8,735)	(6,927)	(29,574)	10,351	2036	(2,861)	1,001	(1,860)	8,998	(3,497)	(5,356)
(5,334)	(8,144)	(6,486)	(27,684)	7,737	2037	(2,678)	749	(1,930)	8,998	(3,497)	(5,426)
(4,926)	(7,553)	(6,045)	(25,795)	5,124	2038	(2,496)	496	(2,000)	8,998	(3,497)	(5,496)
(4,519)	(6,962)	(5,604)	(23,905)	2,510	2039	(2,313)	243	(2,070)	8,998	(3,497)	(5,567)
(4,111)	(6,371)	(5,163)	(15,646)	-	2040	(1,514)	-	(1,514)	6,854	(2,663)	(4,177)
	(5,781)	(4,722)	(10,503)	-	2041	(1,016)	-	(1,016)	4,913	(1,909)	(2,925)
		(4,281)	(4,281)	-	2042	(414)	-	(414)	2,100	(816)	(1,230)
			-	-	2043	-	-	-	-	-	-

Nominal \$ 2016-2038 (106,012) 85,654 (12,605)

NPV 7.79% 2016-2017

NPV 7.55% 2018-2042 (60,929) 59,747 (1,181)

(88,508) (101,114)

(53,458) (54,639)

SCG/SDG&E/Tax/Exh No:SCG-37-WP-S/SDG&E-35-WP-S/Witness: R. Reeves

**SoCalGas/SDG&E
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**SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
NET-TO-GROSS MULTIPLIER**

Line No.	Description	Uncollectible and Franchise Fee Factor		State & Federal Tax Factor	N-T-G Multiplier	
		Electric	Gas	Electric and Gas	Electric	Gas
1	Revenues	1.000000	1.000000	1.000000	1.000000	1.000000
2	Uncollectible Tax Rate	0.001740	0.001740	0.000000	0.001740	0.001740
3	Uncollectible Amount Applied	1.000000	1.000000	1.000000	1.000000	1.000000
4	Less: Uncollectible (Line 2 * Line 3)	0.001740	0.001740	0.000000	0.001740	0.001740
5	Subtotal (Line 3 - Line 4)	0.998260	0.998260	1.000000	0.998260	0.998260
6	Franchise Fees Tax Rate	0.034468	0.020799	0.000000	0.034468	0.020799
7	Franchise Fees Amount Applied (Line 5)	0.998260	0.998260	1.000000	0.998260	0.998260
8	Less: Franchise Fees (Line 6 * Line 7)	0.034408	0.020763	0.000000	0.034408	0.020763
9	Subtotal (Line 7 - Line 8)	0.963852	0.977497	1.000000	0.963852	0.977497
10	S.I.T. Rate			0.088400	0.088400	0.088400
11	S.I.T. Amount Applied (Line 9)			1.000000	0.963852	0.977497
12	Less: S.I.T. (Line 10 * Line 11)			0.088400	0.085205	0.086411
13	Subtotal (Line 11 - Line 12)			0.911600	0.878648	0.891086
14	F.I.T. Rate			0.210000	0.210000	0.210000
15	F.I.T. Amount Applied (Line 13)			0.911600	0.878648	0.891086
16	Less: F.I.T. (Line 14 * Line 15)			0.191436	0.184516	0.187128
17	Net Operating Revenues (Line 15 - Line 16)			0.720164	0.694132	0.703958
18	Uncollectible and Franchise Fee Factor (1 / Line 9)	1.037504	1.023021			
19	State & Federal Tax Factor (1 / Line 17)			1.388573		
20	N-T-G Multiplier (1 / Line 17)				1.440649	1.420539

 = Changes to original file to reflect new tax rate beginning in 2018

SoCalGas/SDG&E
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	SCG	SDG&E
	2018	2018
Federal Tax Rate	21.00%	21.00%
State Tax Rate	8.84%	8.84%
Gross Up	1.389	1.389
Percent Debt	45.60%	45.25%
Percent Preferred	2.40%	2.75%
Percent Common	52.00%	52.00%
Cost of Debt	4.33%	4.59%
Cost of Preferred	6.00%	6.22%
Cost of Common equity	10.05%	10.20%
ROE Kicker	0.00%	0.00%
Weighted cost of debt - Pre-tax	1.97%	2.08%
Weighted cost of preferred - pre-tax	0.14%	0.17%
Weighted cost of Common -pre tax	5.23%	5.30%
WACC Pre Tax	7.34%	7.55%
WACC After Tax	6.79%	6.97%
Discount Rate	7.34%	7.55%

Cost of Debt	1.970%	2.080%
Grossed-up Cost of Preferred	0.194%	0.236%
Grossed-up Cost of Common	7.262%	7.359%
Total Grossed-up Return	<u>9.427%</u>	<u>9.675%</u>