

Company: Southern California Gas Company (U904G)
San Diego Gas & Electric Company (U902M)
Proceeding: 2019 General Rate Case
Application: A.17-10-007/-008 (cons.)
Exhibit: _____

UPDATE TESTIMONY OF
SOUTHERN CALIFORNIA GAS COMPANY AND
SAN DIEGO GAS & ELECTRIC COMPANY
AUGUST 2018

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



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1 **UPDATE TESTIMONY OF SOUTHERN CALIFORNIA GAS COMPANY**
2 **AND SAN DIEGO GAS & ELECTRIC COMPANY**

3 **I. INTRODUCTION**

4 This exhibit presents the update phase testimony of Southern California Gas Company
5 (SoCalGas or SCG) and San Diego Gas & Electric Company (SDG&E) (jointly, Utilities) for the
6 Test Year (TY) 2019 General Rate Case (GRC) Application (A.) 17-10-007/-008 (cons.) (Update
7 Testimony). The Utilities are timely submitting this Update Testimony, pursuant to the Assigned
8 Commissioner’s Scoping Memorandum and Ruling issued on January 29, 2018 (Scoping
9 Memo), and the California Public Utilities Commission’s (CPUC or Commission) Rate Case
10 Plan established by Decision (D.) 89-01-040, as modified by D.93-07-030, D.07-07-004, and
11 D.14-12-025, regarding:

- 12 • “Known changes in cost of labor based on contract negotiations;”
- 13 • Changes in labor and “non-labor escalation factors;” and/or
- 14 • “Known changes due to governmental action such as changes in tax rates, postage
15 rates, or assessed valuation.”¹

16 The Update Testimony reflects the consequent changes to the Results of Operations (RO)
17 model, including the changes that SoCalGas and SDG&E agreed to during the course of
18 discovery, in rebuttal testimony, or at hearings (see Attachments H and I, Incorporated Changes).
19 Moreover, SDG&E has included an approximately \$1.3 million downward adjustment to the
20 SDG&E Real Estate & Facilities TY 2019 GRC Operations and Maintenance (O&M) forecast.
21 This adjustment became necessary in light of the recently issued (August 10, 2018) D.18-08-008
22 granting SDG&E’s Application (A.17-04-027) for authority to implement its Customer
23 Information System (CIS) Replacement Program. Approximately \$1.3 million in forecasted rent
24 expense for the Century Park (CP) Annex facility was included within the TY 2019 SDG&E
25 O&M real estate forecast because SDG&E signed the multi-year lease for CP Annex in 2013,
26 with revisions in 2016 and 2017. The rent cost was also in the CIS budget because, if the
27 application was approved, SDG&E planned to charge the rent to the CIS project. Now that the
28 Commission has issued D.18-08-008, SDG&E has removed herein the \$1.3 million from the
29 GRC O&M forecast, to avoid double recovery.

¹ D.07-07-004, Appendix A, at A-36, Items 1A and 1B.

1 This exhibit is organized into separately sponsored sections addressing specific areas of
2 update. The Summary of Earnings tables and workpapers follow as attachments for the
3 corresponding witnesses' testimony. A summary of this exhibit is as follows:

- 4 **Section I:** Introduction
- 5 **Section II:** Update Testimony of SoCalGas and SDG&E on Customer Services –
6 Field (CS-F) (Gwen R. Marelli)
- 7 **Section III:** Update Testimony on Escalation
- 8 **A.** Escalation of SoCalGas and SDG&E (Scott R. Wilder)
- 9 **B.** Corporate Center Escalation of SoCalGas and SDG&E (Mia L.
10 DeMontigny)
- 11 **Section IV:** Update Testimony of SoCalGas and SDG&E on Compensation & Benefits
12 (Debbie S. Robinson)
- 13 **Section V:** Update Testimony on Postage Expenses
- 14 **A.** Postage Expenses of SoCalGas (Michael H. Baldwin)
- 15 **B.** Postage Expenses of SDG&E (Jerry D. Stewart)
- 16 **Section VI:** Update Testimony of SoCalGas and SDG&E on Taxes (Ragan G. Reeves)
- 17 **Section VII:** Update Testimony on SDG&E Real Estate Real Estate & Facilities Rents
18 and Operating Expenses (R. Dale Tattersall)
- 19 **Section VIII:** Update Testimony of SoCalGas and SDG&E on Results of Operations
20 (Ryan Hom)
- 21
- 22 **Attachment A:** SoCalGas Summary of Earnings Tables (Ryan Hom)
- 23 **Attachment B:** SDG&E Summary of Earnings Tables (Ryan Hom)
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36 Incorporated Changes (Ryan Hom)

1 **II. UPDATE TESTIMONY OF GWEN R. MARELLI ON BEHALF OF SOCALGAS**
2 **CUSTOMER SERVICES-FIELD (CS-F)**

3 This testimony updates the CS-F Meter Set Assembly (MSA) Inspections Program cost
4 category for SoCalGas to incorporate union contract changes. The MSA Inspection
5 Representative (MIR), MSA Office Representative (MOR) and MSA Office Representative -
6 Bilingual job classifications went up two pay grade levels from a pay grade 1 to a pay grade 3.
7 The updated TY 2019 estimate incorporates the wage rate increase associated with the change in
8 pay grade level.

9 Table GRM-1, below, shows the original and updated TY 2019 O&M Summary for the
10 CS-F MSA Inspection Program cost category. The updated workpapers, SCG-18-WP-R -
11 2FC005 CS – Field MSA Inspection Program, Supplemental Workpapers 1 through 6,² are
12 provided as Attachment C.

13 **TABLE GRM-1**
14 **O&M Summary for CS-F MSA Inspection Program Cost Category**

CS-F MSA Inspection Program			
In 2016 \$ (000s)			
Expense Item	Original TY 2019 Estimated	Updated TY 2019 Estimated	Change
Labor	\$ 16,099	\$ 17,518	\$ 1,419
Non-Labor	\$ 603	\$ 603	\$ 0
Total	\$ 16,702	\$ 18,121	\$ 1,419

15
16 This concludes my prepared Update Testimony.

² Ex. 120 SCG/Marelli.

1 **III. UPDATE TESTIMONY ON ESCALATION**

2 **A. Updated Testimony of Scott R. Wilder on Behalf of SoCalGas and SDG&E –**
3 **Escalation**

4 This testimony updates the SoCalGas and SDG&E proposed cost escalation factors. The
5 Rate Case Plan specifically contemplates updates for “[k]nown changes in cost of labor based on
6 contract negotiations” or “known changes that result from updated data using the same indexes
7 used in the original presentation during hearings,” as well as “[c]hanges in non-labor escalation
8 factors based on the same indexes the party used in its original presentation during hearings.”³

9 The updated cost escalations shown here were developed using indexes from the Second
10 Quarter 2018 Power Planner forecast of IHS/Markit Global Insight’s Utility Cost Information
11 Service published on July 26, 2018.

12 Table SRW U-1, below, updates and replaces the escalations previously shown in my
13 SDG&E direct testimony, served on October 6, 2017.⁴

14 **TABLE SRW U-1: SAN DIEGO GAS & ELECTRIC COMPANY**
15 **SUMMARY OF ESCALATION COST INDEXES**
16 (based on IHS Global Insight 2nd Quarter 2018 utility cost forecast)

Annual Percent Changes	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Shared Services	2.00%	1.79%	1.71%	1.74%	1.70%	1.90%	2.27%	2.53%	2.54%	2.42%	2.37%
Operations & Maintenance											
Labor O&M Index	1.90%	2.18%	2.14%	2.27%	2.38%	2.44%	2.88%	3.12%	3.17%	3.03%	2.95%
Electric Nonlabor O&M Index	2.29%	1.20%	1.01%	-0.06%	0.09%	1.46%	2.84%	2.05%	1.84%	1.58%	1.51%
Gas Nonlabor O&M Index	2.28%	1.67%	1.71%	-0.05%	0.60%	1.90%	2.58%	1.87%	1.90%	1.73%	1.77%
Post-Test-Year GEOMPI	2.06%	1.81%	1.73%	1.31%	1.49%	2.08%	2.84%	2.68%	2.64%	2.47%	2.41%
Capital-Related											
Steam Production Plant	3.34%	1.38%	1.44%	4.56%	3.15%	0.39%	2.79%	2.84%	2.22%	2.18%	1.90%
Other Production Plant	7.41%	3.10%	3.38%	3.01%	3.83%	4.32%	4.25%	2.85%	3.24%	2.73%	2.38%
Electric Distribution Plant	3.46%	3.61%	3.08%	2.42%	1.56%	3.69%	4.50%	3.74%	3.89%	3.21%	2.93%
Electric Plant	3.76%	3.38%	2.97%	2.64%	1.87%	3.47%	4.34%	3.60%	3.71%	3.09%	2.81%
Total Gas Plant	7.93%	-0.58%	1.10%	-1.40%	-0.29%	5.35%	3.39%	3.88%	1.93%	1.58%	1.73%
Combined Cycle Plant	4.55%	1.91%	2.04%	4.07%	3.36%	1.62%	3.26%	2.84%	2.55%	2.36%	2.05%
Common Plant	4.35%	2.23%	2.38%	1.36%	1.15%	3.93%	4.28%	3.66%	3.21%	2.68%	2.52%

17
18 Table SRW U-2, below, updates and replaces the escalations previously shown in my
19 SoCalGas direct testimony, served on October 6, 2017.⁵

³ See D.07-07-004, Appendix A, at A-36, Items 1A and 1B.

⁴ Ex. 336 SDG&E/Wilder at Table SRW-2.

⁵ Ex. 334 SCG/Wilder at Table SRW-2.

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TABLE SRW U-2: SOUTHERN CALIFORNIA GAS COMPANY
SUMMARY OF ESCALATION COST INDEXES
(based on IHS/Markit Global Insight 2nd Quarter 2018 utility cost forecast)

<i>Annual Percent Changes</i>	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<u>Shared Services</u>	2.00%	1.91%	1.75%	0.96%	1.23%	2.24%	2.81%	2.53%	2.46%	2.22%	2.20%
<u>Operations & Maintenance</u>											
Labor O&M Index	2.25%	2.41%	2.26%	2.35%	2.45%	2.50%	2.88%	3.37%	3.29%	3.05%	2.98%
Gas Nonlabor O&M Index	1.99%	1.63%	1.57%	-0.58%	0.20%	2.16%	3.06%	1.79%	1.78%	1.52%	1.56%
Post-Test-Year GOMPI	2.14%	2.06%	1.95%	1.05%	1.47%	2.35%	2.96%	2.68%	2.64%	2.40%	2.38%
<u>Capital-Related</u>											
Total Gas Plant	7.93%	-0.58%	1.10%	-1.40%	-0.29%	5.35%	3.39%	3.88%	1.93%	1.58%	1.73%

This concludes my prepared Update Testimony.

1 **B. Updated Testimony of Mia L. Demontigny on Behalf of SoCalGas and**
2 **SDG&E – Corporate Center Escalation**

3 As a result of the escalation factors update presented by Scott Wilder, the Corporate
4 Center allocations to SoCalGas and SDG&E have been updated. The escalation approach used
5 by Corporate Center in this filing is two-fold:

- 6 i. Forecast all non-standard costs in 2019 dollars, and
- 7 ii. Escalate all standard forecasts, stated in 2016 dollars, to 2019 dollars.

8 The combined escalated forecasts are shown as final allocations to SoCalGas and
9 SDG&E for TY 2019. Both SoCalGas and SDG&E then treat these allocations as non-standard,
10 so they are not included in calculations for further escalation. This approach was described in
11 my revised direct testimony.⁶

12 For purposes of this update, there was no change to the Corporate Center’s non-standard
13 cost forecasts. The impact of the new 2019 escalation factors for standard cost forecasts is as
14 follows:

	<u>Used in Application</u>	<u>Used in Update</u>
15 Non-Labor	1.0534	1.0648
16 Labor	1.0849	1.0869

17 As described in the revised direct testimony, the Non-Labor is a simple average of
18 SDG&E electric and gas non-labor indices (except for Federal Energy Regulatory Commission,
19 “FERC,” account 926, Employee pensions and benefits). The Labor factor is the Shared
20 Services Operations and Maintenance Index used by SDG&E. Workpapers included with this
21 update filing, Attachment D, show how the factors were calculated, and they are consistent with
22 the indices used by SDG&E. SDG&E indices were selected as the basis for Corporate Center,
23 since both entities are primarily located in the San Diego market.
24

25 Both the Non-Labor and average Labor factor have increased for 2019 in this update,
26 resulting in \$263,000 higher allocations to SoCalGas and \$205,000 higher allocations to
27 SDG&E.

⁶ Ex. 315 SCG/SDG&E/DeMontigny at 15 and 16.

1 The only FERC account affected by the update in escalation factors in this testimony is
2 F923.1, Outside Services Employed, which are workpaper groups 2SE000-001 for SoCalGas and
3 1SE000-001 for SDG&E.⁷ Other FERC accounts itemized above were all forecasted as non-
4 standard costs for 2019, with no further escalation impact.

5 This concludes my prepared Update Testimony.

⁷ Exs. 344 SCG/Hom at Appendix B and 346 SDG&E/Hom at Appendix B.

1 **IV. UPDATE TESTIMONY OF DEBBIE S. ROBINSON ON BEHALF OF**
2 **SOCALGAS AND SDG&E – COMPENSATION & BENEFITS**

3 This testimony updates the estimate of the TY 2019 forecast for the medical benefits for
4 SoCalGas and SDG&E. The medical cost forecasts shown in my October 6, 2017 direct
5 testimony⁸ were based on the following:

- 6 • Forecasted headcount;
- 7 • Final 2017 rates, net of employee contributions;
- 8 • Percentage of enrollment in each benefit plan, by company, union status, and
9 coverage level, based on actual data as of February 2017; and
- 10 • 2018 and 2019 escalation based on a medical trend forecast prepared by Willis
11 Towers Watson.

12 The medical cost forecast has been updated to reflect actual 2018 and preliminary 2019
13 rates, net of employee contributions, and the actual percentage of employees enrolled in each
14 benefit plan, by company, by union status and coverage level, based on actual data as of January
15 2018. Headcount assumptions remain unchanged.

16 My direct testimony forecasted TY 2019 medical costs of \$96.0 million for SoCalGas
17 and \$56.2 million for SDG&E.⁹ With the updates discussed above, TY 2019 medical costs are
18 now forecasted at \$94.3 million for SoCalGas (a decrease of \$1.7 million compared to my direct
19 testimony) and \$55.80 million for SDG&E (a decrease of \$0.4 million compared to my direct
20 testimony), as shown in Table DSR-1.

21 **TABLE DSR-1**
22 **SoCalGas and SDG&E Medical Cost Forecast**

Medical In 2019 \$ (000s)			
	Original TY 2019 Estimated	Updated TY 2019 Estimated	Change
SoCalGas	\$ 96,023	\$ 94,320	\$ (1,703)
SDG&E	\$ 56,204	\$ 55,796	\$ (408)

⁸ Ex. 216 SCG/SDG&E/Robinson at 25.

⁹ *Id.*

1 This medical cost forecast update has not been reflected in Corporate Center cost
2 allocations. Please see Attachments E-1 and E-2 for workpapers associated with this update.

3 This concludes my prepared Update Testimony.

1 **V. UPDATE TESTIMONY ON POSTAGE EXPENSES**

2 **A. Update Testimony of Michael H. Baldwin on Behalf of SoCalGas – Postage**
3 **Expenses**

4 This testimony updates the SoCalGas TY 2019 postage expense forecast due to a postage
5 rate increase.

6 **Non-Shared Services (NSS) 200004.001 – Credit and Collections-Postage**

7 The increase in the estimated postage expense is due to a half cent postage rate increase
8 which became effective January 21, 2018. The postage rate increase results in a \$7,230 increase
9 in 2018 and a \$7,230 increase in TY 2019 forecasted Credit and Collection-Postage expenses.

10 Table MHB-U-1, below, shows the original and updated 2018 and TY 2019 forecasts.

11 Attachment F, Workpapers to Update Testimony of Michael H. Baldwin, include the calculations
12 used to derive the updated forecast for the Non-Shared Services workgroup 200004.001.¹⁰

13 **TABLE MHB-U-1**
14 **Credit and Collections Postage Update**

	Original Application			Update*		Change	
	2017	2018	2019	2018	2019	2018	2019
Postage Rate	0.413	0.413	0.413	0.416	0.416	0.003	0.003
Estimated Number of Collection Notices							
	2,410,000	2,410,000	2,410,000	2,410,000	2,410,000	-	-
Postage Expense	\$995,330	\$995,330	\$995,330	\$1,002,560	\$1,002,560	\$7,230	\$7,230

15 * The increase in the estimated postage expense is due to the postage rate change, which became effective January 21, 2018.

16 **NSS 200005.001 – Remittance Processing-Postage**

17 The increase in the estimated postage expense is due to a half cent postage rate increase
18 which became effective January 21, 2018. The postage rate increase results in a \$214,000
19 increase in 2018 and a \$215,000 increase in TY 2019 forecasted Remittance Processing-Postage
20 expenses. Table MHB-U-2, below, shows the original and updated 2018 and TY 2019 forecasts.

21 Attachment F includes the calculations used to derive the updated forecast for the Non-Shared
22 Services workgroup 200005.001.¹¹

¹⁰ Ex. 132 SCG/Baldwin at 71.

¹¹ Ex. 132 SCG/Baldwin at 88-89.

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TABLE MHB-U-2
Total Updated Remittance Processing – Postage (including the Home Energy Guide)

NSE In 2016 (\$000)	Original Application			Update		Change	
	2017	2018	2019	2018	2019	2018	2019
Remittance Processing Postage Total	16,340	15,087	13,812	15,301	14,027	214	215
Total Remittance Processing Postage Changes	-671	-1,924	-3,199	-1,710	-2,984	214	215
Increase in postage due to meter growth	180	417	670	417	670	0	0
USPS Postage Rate Impacts	-95	-93	-91	121	118	214	209
FOF reduction in postage	-756	-2,248	-4,282	-2,248	-4,282	0	0
Postage for Home Energy Guide (HEG)	0	0	504	0	510	0	6

NSS 20005.001 – Remittance Processing-Postage (Home Energy Guide)

The increase in the estimated postage expense for Home Energy Guide is due to a half cent postage rate increase which became effective January 21, 2018. The postage rate increase results in a \$6,000 increase in TY 2019 forecasted Remittance Processing-Postage Home Energy Guide expenses. Attachment F includes the calculations used to derive the updated forecast for the Non-Shared Services workgroup 20005.001.¹²

This concludes my prepared Update Testimony.

¹² Ex. 132 SCG/Baldwin at 90.

1 **B. Update Testimony of Jerry D. Stewart on Behalf of SDG&E - Postage**
2 **Expenses**

3 This testimony updates the SDG&E TY 2019 postage expense forecast due to a postage
4 rate increase.

5 **Non-Shared Services (NSS) 100004.001 - Postage**

6 The increase in the estimated postage expense is due to a postage rate change which
7 became effective January 21, 2018, resulting in an increase in the average postage rate of 1.29%
8 in 2018 and 1.29% in 2019. The postage rate increase results in an \$49,800 increase in 2018 and
9 a \$48,000 increase in TY 2019 forecasted postage expenses.

10 **TABLE JDS-U-1**
11 **SDG&E Postage Cost Update**

In \$000's	Original Application			Update		Change	
	2017	2018	2019	2018	2019	2018	2019
Average Rate	\$ 0.389	\$ 0.389	\$ 0.389	\$ 0.394	\$ 0.394	\$ 0.005	\$ 0.005
Average Rate Change %						1.29%	1.29%
Postage							
Expense	\$ 4,239	\$ 4,365	\$ 4,495	\$ 4,457	\$ 4,588	\$ 92	\$ 93
Savings	\$ (193)	\$ (414)	\$ (639)	\$ (456)	\$ (684)	\$ (42)	\$ (45)
Total Forecast	\$ 4,046	\$ 3,951	\$ 3,856	\$ 4,001	\$ 3,904	\$ 50	\$ 48

12 Attachment G, Workpapers to Update Testimony of Jerry D. Stewart, include the
13 calculation used to derive the updated forecast for the Non-Shared Services workgroup
14 100004.001.¹³

15 This concludes my prepared Update Testimony.
16

¹³ Ex. 148 SDG&E/Stewart at 63-64.

1 **VI. UPDATE TESTIMONY OF RAGAN G. REEVES ON BEHALF OF SOCALGAS**
2 **AND SDG&E – TAXES**

3 This testimony updates the following four items. First, it updates the SoCalGas and
4 SDG&E proposed payroll tax and ad valorem tax forecasts for known changes due to
5 governmental actions, including changes in rates and changes in assessed valuation. These
6 updates replace the rates previously shown in my second revised direct testimony for SoCalGas¹⁴
7 and SDG&E.¹⁵

8 Second, this testimony corrects an error in the calculation of the SoCalGas and SDG&E
9 ad valorem tax forecasts, as described in my rebuttal testimony for SoCalGas¹⁶ and SDG&E.¹⁷
10 Third, it discusses new Internal Revenue Service (IRS) proposed regulations related to the bonus
11 depreciation rules under the Tax Cuts and Jobs Act (TCJA). Fourth, this testimony provides an
12 estimate of the 2018 revenue requirement impact for SoCalGas and SDG&E of the changes in
13 tax law from the TCJA, as discussed in my second revised direct testimony.¹⁸

14 **A. Payroll Taxes**

15 SoCalGas and SDG&E have updated their TY 2019 composite payroll tax rates to account
16 for the following changes brought about by governmental action occurring since their respective
17 Applications were filed on October 6, 2017. First, on November 27, 2017, the Social Security
18 Administration (SSA) set the actual 2018 Old Age Survivors Disability Insurance (OASDI) wage
19 base limit at \$128,400.¹⁹ This is lower than the forecasted 2018 OASDI wage base limit of
20 \$130,500, provided by the SSA in its 2017 Annual Report released in July 2017, which was used
21 to calculate payroll taxes in my second revised direct testimonies. The actual wage base limit of

14 Ex. 261 SCG/Reeves.

15 Ex. 265 SDG&E/Reeves.

16 Ex. 264 SCG/Reeves.

17 Ex. 267 SDG&E/Reeves.

18 Exs. 261 SCG/Reeves and 265 SDG&E/Reeves.

19 See Social Security Administration (SSA), *Updated 2018 Taxable Maximum Amount Announced*
(November 17, 2017), available at <https://www.ssa.gov/news/press/releases/2017/#11-2017-1>.

1 \$128,400 for 2018 was confirmed in the SSA’s 2018 Annual Report, which was released on June
2 5, 2018.²⁰

3 Second, effective January 1, 2018, the California Employment Development Department
4 set the 2018 State Unemployment Insurance (SUI) rate for SoCalGas and SDG&E at 2.6% (not
5 including the 0.10% Employment Training Tax). This is lower than the 3.0% SUI rate used by
6 SoCalGas and SDG&E to forecast payroll taxes in the testimony.

7 Third, SDG&E’s payroll taxes have been updated to reflect that, effective January 1,
8 2018, the Nevada Department of Employment, Training & Rehabilitation set the actual 2018
9 Nevada SUI wage base limit at \$30,500. This is higher than the \$29,500 wage base limit used by
10 SDG&E to forecast payroll taxes in the Application.²¹ This change does not impact the
11 calculation of SoCalGas’ payroll taxes.

12 The impact of these changes on the TY 2019 composite payroll tax rate for SoCalGas and
13 SDG&E are shown in the table below.

Composite Payroll Tax Rate – TY 2019	April 2018 Second Revised Direct Testimony	August 2018 Update Testimony
SoCalGas	7.44%	7.41%
SDG&E	6.66%	6.64%

14
15 **B. Ad Valorem Taxes**

16 i. Correction of Formula Error in Results of Operations Model

17 In my rebuttal testimony for SoCalGas and SDG&E, I described a formula error in the
18 RO Model that was discovered when SoCalGas and SDG&E were preparing a response to a data

²⁰ See The 2018 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds (2018 Annual Report), Table V.C1, which is available on the SSA’s website at: <https://www.ssa.gov/OACT/TR/2018/tr2018.pdf>. Consistent with Update Testimony in prior GRCs, SoCalGas and SDG&E are not reflecting revised or alternate forecasts by the SSA for years after 2018 as shown in the 2018 Annual Report. Such forecasts remain subject to change and thus are outside the scope for Update Testimony as set forth in the Commission’s Rate Case Plan.

²¹ SDG&E has a relatively small amount of payroll in Nevada related to its Desert Star Energy Center facility located in Nevada.

1 request from The Utility Reform Network (TURN) regarding ad valorem (*i.e.*, property) taxes.²²
 2 The formula error caused deferred income taxes for ad valorem tax purposes to be too low for
 3 TY 2019. This resulted in a higher forecasted ad valorem tax for TY 2019 than was warranted.
 4 My rebuttal testimony stated that SoCalGas and SDG&E “will reflect the correction of this error
 5 and the associated reduction in TY 2019 property taxes in its Update Testimony.”²³ This
 6 formula error has been corrected in the RO Model as part of this Update Testimony. The impact
 7 of the error correction is shown in the following table.

Impact on 2019 Calendar Year Ad Valorem Tax – Operating (\$ in thousands)	April 2018 Second Revised Direct Testimony (Before Correction)	Corrected Amounts
SoCalGas	\$83,366	\$79,740
SDG&E – Electric Distribution	\$75,006	\$73,073
SDG&E – Electric Generation	\$14,948	\$14,697
SDG&E – Gas	\$16,209	\$15,791

8 ii. Updates for New Assessed Valuations and New Ad Valorem Tax Rates

9 Following the filings of their respective Applications, SoCalGas and SDG&E received new
 10 assessed valuations for ad valorem taxes from the California State Board of Equalization for the
 11 lien date January 1, 2017. These new assessed values form the basis for ad valorem taxes paid for
 12 the period July 1, 2017 to June 30, 2018. In addition, in November 2017, SoCalGas and SDG&E
 13 received tax bills with the ad valorem tax rates for the same period. This update reflects the
 14 impact of the actual 2017 assessed valuations established by the State Board of Equalization, and
 15 the new ad valorem tax rates in the most recent ad valorem tax bills received by SoCalGas and
 16 SDG&E.

17 The updated composite ad valorem tax rates for TY 2019 resulting from governmental
 18 actions by counties in which SoCalGas and SDG&E have property is 1.32758% for SoCalGas and
 19 1.58132% for SDG&E. Consistent with the Commission’s Rate Case Plan, SoCalGas and SDG&E

²² See Ex. 264 SCG/Reeves at 20; Ex. 267 SDG&E/Reeves at 21-22.

²³ Ex. 264 SCG/Reeves at 20; Ex. 267 SDG&E/Reeves at 22.

1 are updating their ad valorem taxes and composite ad valorem tax rates for TY 2019 in this Update
 2 Testimony. The impact of these updates is shown in the following tables.²⁴

SoCalGas (\$ in thousands)	April 2018 Second Revised Direct Testimony (After Correction)	August 2018 Update Testimony
2019 Calendar Year Capitalized Ad Valorem Tax on CWIP	\$8,027	\$8,094
2019 Calendar Year Ad Valorem Tax – Operating	\$79,740	\$77,526

SDG&E – Electric Distribution (\$ in thousands)	April 2018 Second Revised Direct Testimony (After Correction)	August 2018 Update Testimony
2019 Calendar Year Capitalized Ad Valorem Tax on CWIP	\$4,420	\$4,322
2019 Calendar Year Ad Valorem Tax – Operating	\$73,073	\$73,653

SDG&E – Electric Generation (\$ in thousands)	April 2018 Second Revised Direct Testimony (After Correction)	August 2018 Update Testimony
2019 Calendar Year Capitalized Ad Valorem Tax on CWIP	\$112	\$110
2019 Calendar Year Ad Valorem Tax – Operating	\$14,697	\$14,660

SDG&E – Gas (\$ in thousands)	April 2018 Second Revised Direct Testimony (After Correction)	August 2018 Update Testimony
2019 Calendar Year Capitalized Ad Valorem Tax on CWIP	\$1,843	\$1,802
2019 Calendar Year Ad Valorem Tax – Operating	\$15,791	\$15,987

²⁴ The April 2018 amounts in the following tables have been adjusted to reflect the correction to the RO Model formula error described in Section II.B. of this testimony. The August 2018 Update Testimony amounts in the following tables reflect only the impact of the new ad valorem assessments and tax rates and do not reflect the impact of changes made to the RO Model as a result of testimony sponsored by other witnesses in this Update Testimony filing.

1 iii. Total Impact of the Corrections and Updates to Ad Valorem Taxes

2 The tables below show the total impact on SoCalGas' and SDG&E's capitalized (*i.e.*,
 3 CWIP) and O&M (*i.e.*, operating) ad valorem taxes for TY 2019 for the correction of the formula
 4 error in the RO Model, the new assessed valuations, the new ad valorem tax rates, and changes
 5 made to the RO Model as a result of testimony sponsored by other witnesses in this Update
 6 Testimony submission.

SoCalGas (\$ in thousands)	April 2018 Second Revised Direct Testimony	August 2018 Update Testimony
2019 Calendar Year Capitalized Ad Valorem Tax on CWIP	\$8,027	\$8,268
2019 Calendar Year Ad Valorem Tax – Operating	\$83,366	\$77,616

SDG&E – Electric Distribution (\$ in thousands)	April 2018 Second Revised Direct Testimony	August 2018 Update Testimony
2019 Calendar Year Capitalized Ad Valorem Tax on CWIP	\$4,420	\$4,488
2019 Calendar Year Ad Valorem Tax – Operating	\$75,006	\$73,697

SDG&E – Electric Generation (\$ in thousands)	April 2018 Second Revised Direct Testimony	August 2018 Update Testimony
2019 Calendar Year Capitalized Ad Valorem Tax on CWIP	\$112	\$109
2019 Calendar Year Ad Valorem Tax – Operating	\$14,948	\$14,577

SDG&E – Gas (\$ in thousands)	April 2018 Second Revised Direct Testimony	August 2018 Update Testimony
2019 Calendar Year Capitalized Ad Valorem Tax on CWIP	\$1,843	\$1,860
2019 Calendar Year Ad Valorem Tax – Operating	\$16,209	\$16,422

10 **C. New Proposed Regulations for the Bonus Depreciation Rules under the**
 11 **TCJA**

12 The bonus depreciation rules under the Internal Revenue Code allow taxpayers to
 13 immediately expense a specified percentage of qualifying property placed in service in a

1 particular year on their tax returns – rather than requiring taxpayers to depreciate the full amount
2 of property over multiple years. Although the TCJA generally eliminated bonus depreciation for
3 regulated utilities for property placed in service after September 27, 2017, the TCJA contained a
4 bonus depreciation transition rule for property that was “acquired” before September 27, 2017
5 and placed in service after that date. But it was unclear how that transition rule precisely
6 applied.

7 SoCalGas’ and SDG&E’s interpretation of the bonus depreciation transition rule is
8 discussed in my second revised direct testimony. It is summarized as follows:

9 [C]onsistent with the language of the TCJA, [SoCalGas/SDG&E] has not taken
10 bonus depreciation on any property that was placed in service after September 27,
11 2017 and was not acquired pursuant to a written binding contract on or before
12 such date.²⁵

13 My second revised direct testimony further explained SoCalGas’ and SDG&E’s position:

14 If the IRS or Treasury issue guidance clarifying the application of the bonus
15 depreciation rules under the TCJA, and such guidance differs from
16 [SoCalGas’/SDG&E’s] interpretation of the rules, [SoCalGas/SDG&E] will
17 revise its calculation of bonus depreciation to be consistent with such guidance.
18 [SoCalGas/SDG&E] proposes to reflect any such revised calculation in its Update
19 Testimony, or alternatively, to track the impact of the revised calculation in its
20 [Tax Memorandum Account (TMA)], depending on the timing of when such IRS
21 or Treasury guidance is issued.²⁶

22 On August 3, 2018, the IRS issued proposed regulations for the bonus depreciation rules
23 under the TCJA.²⁷ These proposed regulations will not be effective until they are adopted by the
24 IRS as final regulations. At that point the final rules will apply prospectively.²⁸ In the recently
25 issued proposed regulations, the IRS clarified, however, that for the bonus depreciation transition
26 rule:

27 Pending the issuance of the final regulations, a taxpayer may choose to apply
28 these proposed regulations to qualified property acquired and placed in service . . .

²⁵ Ex. 261 SCG/Reeves at 19; Ex. 265 SDG&E/Reeves at 21.

²⁶ *Id.*

²⁷ Prop. Reg. 104397-18.

²⁸ See Preamble to Prop. Reg. 104397-18, at 32.

1 after September 27, 2017, by the taxpayer during the taxable years ending on or
2 after September 28, 2017.²⁹

3 SoCalGas and SDG&E are reviewing the proposed regulations to determine what impact
4 the proposed rules will have on SoCalGas' and SDG&E's calculations of bonus depreciation
5 under the TCJA for the time period beginning September 27, 2017. Given the complexity and
6 the timing of the issuance of these new rules, and the substantial number of SoCalGas' and
7 SDG&E's assets that could be impacted by the new rules, SoCalGas and SDG&E will not be
8 able to complete their analysis of the proposed regulations' impact by the time this Update
9 Testimony is due. Accordingly, consistent with SoCalGas' and SDG&E's proposal as set forth
10 in my second revised direct testimony, SoCalGas and SDG&E will track the impact of the
11 proposed regulations on SoCalGas' and SDG&E's bonus depreciation calculations in their
12 respective TMAs.

13 **D. Estimate of the 2018 Revenue Requirement Impact of the TCJA**

14 The TCJA made comprehensive changes to federal tax law beginning in 2018. The
15 impact of the TCJA's changes on SoCalGas' and SDG&E's 2019 TY forecasts are discussed in
16 my second revised direct testimony.³⁰ Because 2018 is an attrition year of the prior TY 2016
17 GRC cycle, the TCJA's impact on the 2018 revenue requirement is outside the scope of
18 SoCalGas' and SDG&E's TY 2019 GRCs.

19 On March 2, 2018, CPUC Energy Division (ED) Director Edward Randolph issued a
20 letter (the ED Letter) to several California utilities, including SoCalGas and SDG&E, regarding
21 the implementation of the TCJA. For the TCJA's impact on 2018, the ED Letter instructed
22 SoCalGas and SDG&E to "follow instructions of the presiding officer [in the 2019 GRC]
23 regarding the need for any filings in that same GRC regarding the TCJA-related balance in the
24 Tax Memorandum Account accumulated through 2018."³¹

25 As discussed in my second revised direct testimony:

²⁹ *Id.*

³⁰ Exs. 261 SCG/Reeves and 265 SDG&E/Reeves.

³¹ Letter from Edward Randolph, Director of the Energy Division, re: Implementation of the Tax Cuts and Jobs Act of 2017 (March 2, 2018) at 3.

1 [SoCalGas/SDG&E] is requesting a sub-account in the TMA to specifically track
2 the impacts of the TCJA . . . through 2018. [SoCalGas/SDG&E] will provide a
3 forecast of the impacts of the TCJA through 2018 and proposes to provide such
4 forecast in its Update Testimony filing in this proceeding if the sub-account has
5 been established by that time.³²

6 The Supplemental Testimony of the Regulatory Account witnesses Rae Marie Yu and
7 Norma Jasso (Exhibits 182 (SCG-42-S) and 185 (SDG&E-41-S), respectively) put forth the
8 proposal to create a new sub-account in the TMA to separately track any impacts through 2018
9 related to the implementation of the TCJA, and provided two options for the Commission's
10 consideration for the disposition of the sub-account. The TMA sub-account requested by
11 SoCalGas and SDG&E has not been established as of the filing date of this Update Testimony.
12 Nonetheless, SoCalGas and SDG&E are providing an estimate of the TCJA's revenue
13 requirement impact for 2018, as discussed below, in anticipation of the TMA sub-account being
14 established in the future.

15 The changes and assumptions used to make these adjustments in the TY 2016 RO Model
16 are the same changes and assumptions that SoCalGas and SDG&E used to reflect the impact of
17 the TCJA in the RO Model for the 2019 GRC that are discussed in my second revised direct
18 testimony.³³

19 Specifically, SoCalGas and SDG&E applied the following methodology to estimate the
20 TCJA's impact on the 2018 authorized revenue requirement. SoCalGas and SDG&E used the
21 final RO Model from the TY 2016 GRC – which reflects the RO amounts from SoCalGas' and
22 SDG&E's final decision in the TY 2016 GRC – as the starting point for the 2018 estimated
23 impact.³⁴ SoCalGas and SDG&E then adjusted the TY 2016 formulas and amounts in the RO
24 Model to reflect the impact of the TCJA as if the TCJA applied to 2016. The adjustments to the
25 TY 2016 RO Model to reflect the impact of the TCJA included the following changes:

- 26 • Changing the federal corporate income tax rate from 35% to 21%;

³² Ex. 261 SCG/Reeves at 4; Ex. 265 SDG&E/Reeves at 4.

³³ See Ex. 261 SCG/Reeves at 3 and 18-23; Ex. 265 SDG&E/Reeves at 3 and 19-24.

³⁴ See D.16-06-054.

- Increasing the Adjusted Rate Assumption Method (ARAM) amortization amount to reflect the return to ratepayers of the excess deferred taxes created by the TCJA’s tax rate decrease;
- Changing the calculation of bonus depreciation to reflect the elimination of the bonus depreciation deduction for regulated utilities;
- Eliminating the IRC Section 199 deduction; and
- Eliminating the deduction for transportation fringe benefits provided to employees.

Finally, SoCalGas and SDG&E applied the authorized 3.5% attrition percentage for the 2017 and 2018 post-test years to the re-calculated revenue requirement impact for 2016, to arrive at an estimated impact of the TCJA for 2018.³⁵

The estimated impact related to the 2018 TCJA impact is shown below:

Estimated Revenue Requirement Increase/(Decrease) from the TCJA (\$ in thousands)	SoCalGas	SDG&E
Total estimated change to 2016 authorized revenue requirement per re-run of 2016 RO Model to reflect the TCJA	(\$59,283)	(\$70,067)
Plus: 2 years of attrition at 3.5%	(\$4,223)	(\$4,990)
= Estimated change to 2018 authorized revenue requirement from TCJA	(\$63,506)	(\$75,057)

The amounts shown in the above table reflect the estimated decreases from the authorized revenue requirement for 2018 before the TCJA, to the authorized revenue requirement for 2018, as adjusted for the TCJA impact. Actual amounts for 2018 – and thus the actual impact of the TCJA on the 2018 revenue requirement – will not be known until the 2018 actual amounts are final. This will occur when SoCalGas and SDG&E file their federal and California 2018 income tax returns. SoCalGas and SDG&E expect to file those returns in October 2019. Accordingly, the amounts presented in the table above are the best estimate of SoCalGas and SDG&E with the information analyzed at the time of this Update Testimony submission and are subject to change. SoCalGas and SDG&E will track the differences between incurred and authorized amounts for

³⁵ D.16-06-054 at Conclusion of Law 60.

1 2018 resulting from the TCJA in their existing TMAs until the requested sub-account is
2 established.

3 This concludes my prepared Update Testimony.

1 **VII. UPDATE TESTIMONY OF R. DALE TATTERSALL ON BEHALF OF SDG&E –**
2 **REAL ESTATE & FACILITIES RENTS AND OPERATING EXPENSES**

3 This testimony updates the forecast of the TY 2019 Real Estate & Facilities rents and
4 operating expenses for SDG&E to remove approximately \$1.3 million in costs approved in the
5 CIS Replacement Program Decision, (D.) 18-08-008.

6 SDG&E signed a multi-year lease for lease for the CP Annex space in 2013, with
7 revisions in 2016 and 2017. The rent costs for CP Annex were included in the overall SDG&E
8 Real Estate & Facilities GRC forecast for SDG&E Rents and Operating Expenses, as costs
9 would have been incurred whether or not the CIS project was approved. The CIS project budget
10 forecast also included rents because, if the Application for authority to implement the CIS
11 Replacement Program (Application (A.) 17-04-027) was approved, SDG&E planned to charge
12 the rent to the CIS project and not to the SDG&E Real Estate budget.

13 On August 10, 2018, the Commission issued D.18-08-008 granting SDG&E's CIS
14 Application. The costs approved in this decision include approximately \$1.3 million for office
15 space in 2019 to accommodate the internal and external resources on the CIS Replacement
16 Program project team.³⁶ Implementation costs will be recorded in a two-way balancing account,
17 the Customer Information System Balancing Account (CISBA),³⁷ and amounts in excess of
18 approved CIS implementation costs will be subject to a reasonableness review by the
19 Commission. An audit of project costs will also be conducted by ORA and must be included
20 with the appropriate cost recovery filing for CISBA costs.

21 As costs for CP Annex rents and operating expenses have been authorized under D.18-
22 08-008, SDG&E is updating GRC forecasts to remove these costs and thus avoid any double
23 recovery.

24 **Non-Shared Services (NSS) 1RE003.000 – Rents and Operating Expenses**

25 The decrease in the forecasted SDG&E rents and operating expenses for TY 2019 is
26 \$1.298 million in non-standard escalation (NSE) expense. Table RDT-U-1, below, updates and

³⁶ A.17-04-027, Prepared Direct Testimony of Laura Atkinson, Chapter 4 (served April 28, 2017) at 4, Table LDA-3.

³⁷ A separate two-way balancing account will record transition, stabilization, and Organizational Change Management costs (TSOBA) for the project.

1 replaces the forecasts previously shown in Table RDT-11 of my direct testimony for SDG&E.³⁸
2 Detailed forecasts for SDG&E rents and operating expenses were provided in response to data
3 request ORA-SDGE-032-LMW.

4 **TABLE RDT-U-1**

5 **SDG&E Real Estate & Facilities Non-Shared Rents and Operating Expenses Update**

REAL ESTATE & FACILITIES (In Nominal \$*)			
C. RENTS AND OPERATING EXPENSES	2016 Adjusted- Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
1. RENTS - SDG&E	17,028	17,513**	485**
Total	17,028	17,513**	485**

6 *Rents are forecasted as non-standard escalation and therefore are shown in nominal \$.

7 **The original TY2019 forecast for SDG&E rents was \$18,811K. This was a change of \$1,783K from 2016 Adjusted
8 recorded.

9 This concludes my prepared Update Testimony.

³⁸ Ex. 169 SDG&E/Tattersall.

1 **VIII. UPDATE TESTIMONY OF RYAN HOM ON BEHALF OF SOCALGAS AND**
2 **SDG&E – SUMMARY OF EARNINGS (SOE)**

3 This testimony updates and summarizes the SoCalGas and SDG&E revenue requirements
4 and addresses three issues not covered in other chapters of the Update Testimony. The Update
5 revenue requirement for SoCalGas is \$2,936,606,000. The Update revenue requirement for
6 SDG&E is \$2,202,534,000 on a combined basis and \$1,763,508,000 and \$439,025,000 for
7 electric and gas departments, respectively. These updates replace the revenue requirement
8 shown in my second revised direct testimony for SoCalGas³⁹ and SDG&E.⁴⁰ Attachment A
9 (SoCalGas SOE) and Attachment B (SDG&E SOE), attached to the Update Testimony, include
10 the Summary of Earnings and Results of Operations Tables for each company.

11 The Update revenue requirements were developed beginning with SoCalGas' and
12 SDG&E's Second Revised Testimony filing revenue requirements served on April 6, 2018 and
13 adding adjustments pursuant to the Commission's Rate Case Plan. Detailed explanations of
14 these changes can be found in the Update Testimony chapters submitted by various SoCalGas
15 and SDG&E witnesses (Chapters II to VII).

16 In addition, the Update revenue requirements reflect other changes agreed to by
17 SoCalGas and SDG&E during the course of discovery, in rebuttal testimony, or at hearings; see
18 Attachment H (SoCalGas Incorporated Changes) and Attachment I (SDG&E Incorporated
19 Changes) for listings of the changes. References have been provided to a rebuttal exhibit
20 number, data request response, or hearings transcript volume and page number for the source of
21 each change.

22 There are three issues described herein that are not addressed in other chapters of the
23 Update Testimony. The basis for including these issues in my testimony is that these changes
24 are downstream impacts that occurred because of the updates made to other the items in this
25 Update Testimony exhibit. The three issues are:

- 26 1. Shared Services Overheads – The shared service overhead factors found in Mr.
27 James Vanderhye's second revised direct testimony⁴¹ and used in the RO Model

³⁹ Ex. 344 SCG/Hom.

⁴⁰ Ex. 346 SDG&E/Hom.

⁴¹ Ex. 324 SCG/SDG&E/Vanderhye at 8.

1 have been revised to include updates made to the payroll tax rate discussed in
2 Chapter VI.

- 3 2. Post-Test Year Ratemaking – Ms. Sandra Hrna’s and Mr. Kenneth Deremer’s
4 post-test year rebuttal testimony states, “SoCalGas/SDG&E therefore proposes
5 that the latest Global Insight (GI) forecast available in June 2018 be used to
6 determine the labor and non-labor TY 2019 O&M escalation indices and will
7 continue into the PTY period.”⁴² The escalation updates covered in Chapter III
8 should be used in the post-test year model that is approved by the Commission.
- 9 3. TCJA Revenue Requirement Adjustment – In his Case Management Exhibit, Mr.
10 Charles Manzuk explains that the revenue requirement impacts of the insurance
11 renewals and quick strike firefighting helicopter costs were uncertain and had yet
12 to be determined.⁴³ Accordingly, SDG&E proposed to maintain the revenue
13 requirement of the TCJA update at the Application level by including an
14 offsetting adjustment of \$66.641 million to potentially account for these
15 uncertainties. In subsequent supplemental testimony, Mr. David Geier explained
16 SDG&E’s need for year-round helitanker availability.⁴⁴ The costs for the year-
17 round helitanker availability of \$3.897 million were detailed in the supplemental
18 workpapers⁴⁵ of Mr. William Speer. The \$3.897 million supporting SDG&E’s
19 year-round helitanker proposal will be deducted from the offsetting adjustment
20 reflecting SDG&E’s TCJA impacts of \$66.641 million and moved to the O&M
21 workpaper group 1ED011.00 in the Update RO Model. There is no revenue
22 requirement impact from this adjustment.

23 Due to the timing of this August 24, 2018 Update Testimony, any additional changes that
24 may occur during further hearings, set to begin on August 28, 2018, are not incorporated in this
25 updated revenue requirement.

26 This concludes my prepared Update Testimony.

⁴² Ex. 242 SCG/Malik (adopted by Hrna) at 6; Ex. 245 SDG&E/Deremer at 5.

⁴³ Ex. 253 SCG/SDG&E/Manzuk at 2

⁴⁴ Ex. 360 SDG&E/Geier at 2 – 10.

⁴⁵ Ex. 70 SDG&E/Speer.

GLOSSARY OF TERMS

ARAM	Adjusted Rate Assumption Method
CIS	Customer Information System
CISBA	Customer Information System Balancing Account
CPUC/Commission	California Public Utilities Commission
CP	Century Park
CS-F	Customer Services – Field
D.	Decision
ED	Energy Division
GI	Global Insight
GRC	General Rate Case
IRS	Internal Revenue Service
MIR	MSA Inspection Representative
MOR	MSA Office Representative
MSA	Meter Set Assembly
NSE	Non-standard escalation
NSS	Non-Shared Services
O&M	Operations and Maintenance
OASDI	Old Age Survivors Disability Insurance
RO	Results of Operations
SDG&E	San Diego Gas & Electric Company
SoCalGas/SCG	Southern California Gas Company
SOE	Summary of Earnings
SSA	Social Security Administration
SUI	State Unemployment Insurance
TCJA	Tax Cuts and Jobs Act
TMA	Tax Memorandum Account
TURN	The Utility Reform Network
TY	Test Year

ATTACHMENT A

SoCalGas Summary of Earnings Tables

Table KN-1
SOCALGAS
TEST YEAR 2019
SUMMARY OF EARNINGS
(Thousands of Dollars)

Line No.	Description	2019 Present Rates (2019\$)	2019 Proposed Rates (2019\$)
1	Base Margin	\$ 2,357,456	\$ 2,853,023
2	Miscellaneous Revenues	98,685	83,583
3	Revenue Requirement	\$ 2,456,141	\$ 2,936,606
<u>Operating and Maintenance Expenses</u>			
4	Gas Distribution	157,111	157,111
5	Transmission	88,852	88,852
6	Underground Storage	60,074	60,074
7	Engineering	112,554	112,554
8	PSEP	83,156	83,156
9	Procurement	4,230	4,230
10	Customer Services	316,143	316,143
11	Information Technology	33,636	33,636
12	Support Services	151,808	151,808
13	Administrative and General	629,977	629,977
14	Subtotal (2016\$)	\$ 1,637,542	\$ 1,637,542
15	Shared Services Adjustments	54,235	54,235
16	Reassignments	(186,209)	(186,209)
17	Escalation	84,607	84,607
18	Uncollectibles (0.316%)	7,276	8,805
19	Franchise Fees (1.372%)	32,365	39,164
20	Total O&M (2019\$)	\$ 1,629,815	\$ 1,638,144
21	Depreciation & Amortization	609,462	609,462
22	Taxes on Income	(93,753)	47,090
23	Taxes Other Than on Income	126,410	126,410
24	Total Operating Expenses	2,271,935	2,421,105
25	Return	184,206	515,500
26	Rate Base	7,015,822	7,023,161
27	Rate of Return	2.63%	7.34%

Table KN-2
SOCALGAS
TEST YEAR 2019

(Thousands of Dollars)

Line No.	Description	2019	2019	2019
		<u>Non-Shared Services</u>	<u>Shared Services</u>	<u>Total</u>
		Proposed Rates	Proposed Rates	Proposed Rates
		(2016\$)	(2016\$)	(2016\$)
1	Base Margin			
2	Miscellaneous Revenues			
3	Revenue Requirement			
	<u>OPERATING & MAINTENANCE EXPENSES</u>			
4	Distribution	150,850	6,261	157,111
5	Transmission	70,530	18,322	88,852
6	Underground Storage	59,640	434	60,074
7	Engineering	94,935	17,619	112,554
8	PSEP	83,156	-	83,156
9	Procurement	4,230	-	4,230
10	Customer Services	300,659	15,484	316,143
11	Information Technology	21,077	12,559	33,636
12	Support Services	125,197	26,611	151,808
13	Administrative and General	621,294	8,683	629,977
14	Subtotal (2016\$)	1,531,568	105,974	1,637,542
A	Shared Services Billed Out	-	(20,162)	(20,162)
B	Shared Services Billed In	-	44,242	44,242
C	Shared Services Overhead Credit	-	(15,717)	(15,717)
D	Shared Services Billed In Overheads	-	22,967	22,967
E	Corporate Reallocation	2,363	-	2,363
F	Subtotal	2,363	31,329	33,692
G	Shared Asset Expense	5,158	-	5,158
H	Billed Capital Overhead Credit	-	(875)	(875)
I	SOP 98 Expense	16,260	-	16,260
15	Total Shared Services Adjustments	23,781	30,454	54,235

Table KN-3
SOCALGAS
TEST YEAR 2019
GAS DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Gina Orozco-Mejia	2GD000	Field Support	70,433	95,907	104,071
Gina Orozco-Mejia	2GD001	Asset Management	8,172	6,964	7,578
Gina Orozco-Mejia	2GD002	Measurement & Regulation	13,832	14,888	16,177
Gina Orozco-Mejia	2GD003	Cathodic Protection	14,403	18,321	19,826
Gina Orozco-Mejia	2GD004	Operations and Management	5,646	7,378	7,972
Gina Orozco-Mejia	2GD005	Regional Public Affairs	3,460	4,420	4,801
		Gas Distribution Total	<u>115,946</u>	<u>147,878</u>	<u>160,426</u>
Devin K. Zornizer	2GS000	Storage Products Manager	146	157	170
Devin K. Zornizer	2GS001	Emergency Services	640	2,815	3,048
		Gas Systems Total	<u>786</u>	<u>2,972</u>	<u>3,218</u>
		Total NSS	<u>116,732</u>	<u>150,850</u>	<u>163,645</u>
Gina Orozco-Mejia	2200-0431	FIELD SERVICES LEADERSHIP & OPERATIONS ASSESSMENT	689	275	296
		Gas Distribution Total	<u>689</u>	<u>275</u>	<u>296</u>
Devin K. Zornizer	2200-0246	Energy Markets & Capacity Products - Director	328	316	340
Devin K. Zornizer	2200-0328	Energy Markets & Capacity Products - Support	610	619	667
Devin K. Zornizer	2200-0330	Energy Markets & Capacity Products - Manager	615	615	663
Devin K. Zornizer	2200-2158	Gas Scheduling	600	724	780
Devin K. Zornizer	2200-2289	GAS CONTROL & SCADA OPERATION GROUP - USS	2,479	3,021	3,256
Devin K. Zornizer	2200-2329	Gas Transmission Planning	606	692	745
		Gas Systems Total	<u>5,238</u>	<u>5,986</u>	<u>6,452</u>
		Total SS	<u>5,927</u>	<u>6,261</u>	<u>6,748</u>
		Total Gas Distribution	<u>\$ 122,659</u>	<u>\$ 157,111</u>	<u>\$ 170,392</u>

Table KN-4
SOCALGAS
TEST YEAR 2019
TRANSMISSION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Elizabeth A. Musich	2GT000	Pipeline Operations	17,692	14,463	15,692
Elizabeth A. Musich	2GT001	Compressor Station Operations	9,732	9,989	10,799
Elizabeth A. Musich	2GT002	Technical Services	1,886	26,467	27,862
		Gas Transmission Total	<u>29,310</u>	<u>50,919</u>	<u>54,353</u>
Michael A. Bermel	2MP001	MAJOR PROJECTS MANAGEMENT & OUTREACH	933	3,646	3,950
Michael A. Bermel	2MP002	PROJECT & CONSTRUCTION MANAGEMENT	201	201	217
Michael A. Bermel	2MP003	PROJECT CONTROLS AND ESTIMATING	124	124	135
		Major Projects Total	<u>1,258</u>	<u>3,971</u>	<u>4,301</u>
Omar Rivera	2SI001	GAS OPERATIONS TRAINING & DEVELOPMENT	1,072	4,735	5,113
Omar Rivera	2SI002	PIPELINE SAFETY & COMPLIANCE	699	2,890	3,147
Omar Rivera	2SI003	PUBLIC AWARENESS	398	1,681	1,802
Omar Rivera	2SI004	ASSET MANAGEMENT	2,087	2,504	2,722
Omar Rivera	2SI005	GAS CONTRACTOR CONTROLS	521	3,830	4,147
		Systems Integrity Total	<u>4,777</u>	<u>15,640</u>	<u>16,931</u>
		Total NSS	<u>35,345</u>	<u>70,530</u>	<u>75,585</u>
Elizabeth A. Musich	2200-0253	DIRECTOR GAS TRANSMISSION - USS	198	240	258
Elizabeth A. Musich	2200-0265	Field Operations Managers - USS	272	419	452
Elizabeth A. Musich	2200-2172	TECHNICAL SERVICES MANAGER - USS	480	357	384
		Gas Transmission Total	<u>950</u>	<u>1,015</u>	<u>1,094</u>
Omar Rivera	2200-0225	USS - VP GAS SYSTEM INTEGRITY	362	629	678
Omar Rivera	2200-0302	BUSINESS PROCESS ESS IMPLEMENTATION AND ESS MOBILE SOLUTIONS	189	302	325
Omar Rivera	2200-0303	APPLICATIONS	231	478	515
Omar Rivera	2200-0305	ESS PRODUCTION SUPPORT	272	666	718
Omar Rivera	2200-0306	WRK MGMT & DATABASES	992	1,858	2,002
Omar Rivera	2200-0308	CONTRACT & MAINTENANCE	843	559	603
Omar Rivera	2200-2023	FIELD TECHNOLOGIES	211	415	448
Omar Rivera	2200-2144	GAS SYSTEM INTEGRITY STAFF & PROGRAMS	273	320	345
Omar Rivera	2200-2344	OPERATOR QUALIFICATION	1,157	1,952	2,104
Omar Rivera	2200-2345	PIPELINE SYSTEM CONSTRUCTION POLICY	699	1,846	1,990
Omar Rivera	2200-2360	QUALITY & RISK	900	1,215	1,309
Omar Rivera	2200-2376	ENTERPRISE GEOGRAPHIC INFORMATION SYSTEM (EGIS)	1,119	2,553	2,751
Omar Rivera	2200-2417	SHARED PUBLIC AWARENESS ACTIVITIES	117	537	579
Omar Rivera	2200-2473	PIPELINE SAFETY & COMPLIANCE MANAGER	535	853	920
Omar Rivera	2200-2551	PIPELINE SAFETY OVERSIGHT	295	573	617
Omar Rivera	2200-7242	RECORDS MANAGEMENT - from 2200-2361	-	2,550	2,748
		Systems Integrity Total	<u>8,195</u>	<u>17,307</u>	<u>18,651</u>
		Total SS	<u>9,145</u>	<u>18,322</u>	<u>19,746</u>
		Total Transmission	<u>\$ 44,490</u>	<u>\$ 88,852</u>	<u>\$ 95,331</u>

Table KN-5
SOCALGAS
TEST YEAR 2019
UNDERGROUND STORAGE
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Neil P. Navin	2US000	Underground Storage	33,323	38,699	41,829
Neil P. Navin	2US001	Storage Risk Management	479	2,031	2,212
Neil P. Navin	2US002	Underground Storage - RSIMP	12,051	18,910	20,324
		SoCalGas Underground Storage Total	<u>45,853</u>	<u>59,640</u>	<u>64,365</u>
		Total NSS	<u>45,853</u>	<u>59,640</u>	<u>64,365</u>
Neil P. Navin	2200-2594	VICE PRESIDENT OF TRANSMISSION & STORAGE	455	434	467
		SoCalGas Underground Storage Total	<u>455</u>	<u>434</u>	<u>467</u>
		Total SS	<u>455</u>	<u>434</u>	<u>467</u>
		Total Underground Storage	<u>\$ 46,308</u>	<u>\$ 60,074</u>	<u>\$ 64,833</u>

Table KN-6
SOCALGAS
TEST YEAR 2019
ENGINEERING
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Deanna R. Haines	2EN000	GAS ENGINEERING ANALYSIS CENTER NGV and ELECTRICAL FIELD MAINTENANCE	5,539	6,083	6,597
Deanna R. Haines	2EN001	LAND SERVICES & RIGHT OF WAY	2,106	3,625	3,900
Deanna R. Haines	2EN002	CIVIL STRUCTURAL & HAZARD MITIGATION ENGINEERING	142	2,517	2,703
		Engineering Total	7,787	12,225	13,200
Maria T. Martinez	2TD000	TIMP & DIMP	74,393	82,710	89,195
		TIMP & DIMP Total	74,393	82,710	89,195
		Total NSS	82,180	94,935	102,395
Deanna R. Haines	2200-0300	DIR ENG & TECH SERVICES	388	808	871
Deanna R. Haines	2200-0309	MRC MANAGEMENT & SPECIAL PROJECTS	862	898	967
Deanna R. Haines	2200-0310	MEASUREMENT & DESIGN	861	1,165	1,255
Deanna R. Haines	2200-0311	MEASUREMENT TECHNOLOGIES	806	1,280	1,380
Deanna R. Haines	2200-0312	MEASUREMENT FIELD SUPPORT	688	1,251	1,348
Deanna R. Haines	2200-0318	ENGINEERING DESIGN MANAGEMENT, PROCESS ENGINEERING & DESIGN DRAFTING	757	2,080	2,241
Deanna R. Haines	2200-0320	RESEARCH & MATERIALS	398	398	429
Deanna R. Haines	2200-0321	MECHANICAL DESIGN	57	180	194
Deanna R. Haines	2200-0322	PIPELINE ENGINEERING	600	672	724
Deanna R. Haines	2200-0323	RESEARCH PLANNING & DEVELOPMENT	92	40	43
Deanna R. Haines	2200-0799	MRC - INSTRUMENTATION REPAIR AND FIELD SUPPORT	1,098	1,325	1,428
Deanna R. Haines	2200-1178	ENGINEERING ANALYSIS CENTER - CHEMICAL LAB	1,500	2,059	2,219
Deanna R. Haines	2200-2248	MRC STANDARDS	611	730	787
Deanna R. Haines	2200-2377	HIGH PRESSURE & DISTRIBUTION ENGINEERING	558	1,290	1,390
Deanna R. Haines	2200-2487	ELECTRICAL DESIGN	154	154	166
		Engineering Total	9,430	14,329	15,442
Maria T. Martinez	2200-7000	TIMP Project Support for SDG&E	967	1,649	1,777
Maria T. Martinez	2200-7001	DIMP Project Support for SDG&E	298	1,641	1,769
		TIMP & DIMP Total	1,265	3,290	3,546
		Total SS	10,695	17,619	18,988
		Total Engineering	\$ 92,875	\$ 112,554	\$ 121,383

Table KN-7
SOCALGAS
TEST YEAR 2019
PROCUREMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Martin F. Lazarus	2SP000	Gas Acquisition	3,913	4,230	4,604
		Total	3,913	4,230	4,604
		Total NSS	3,913	4,230	4,604
		Total SS	-	-	-
		Total Procurement	3,913	4,230	4,604

Table KN-8
SOCALGAS
TEST YEAR 2019
CUSTOMER SERVICES
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Rene F. Garcia	2AM002	Advanced Meter Operations	-	10,477	11,245
		CS Advanced Meter Total	-	10,477	11,245
Gwen R. Marelli	2FC001	Customer Services Field - Operations	112,435	111,576	121,487
Gwen R. Marelli	2FC002	Customer Services Field - Supervision	11,400	11,070	12,053
Gwen R. Marelli	2FC003	Customer Services Field - Dispatch	9,806	8,689	9,465
Gwen R. Marelli	2FC004	Customer Services Field - Support	16,435	17,443	18,947
Gwen R. Marelli	2FC005	MSA Inspection Program	5,867	18,121	19,739
Gwen R. Marelli	2FC006	Meter Reading - Operations	7,032	2,219	2,418
Gwen R. Marelli	2FC007	Meter Reading - Clerical	514	148	161
Gwen R. Marelli	2FC008	Meter Reading - Supervision & Training	1,180	355	387
Gwen R. Marelli	2FC009	Meter Reading - Support	1,337	305	332
		CS - Field & Meter Reading Total	166,006	169,926	184,989
Andrew Cheung	2IN001	CI-Customer Strategy and Engagement -	5,184	7,098	7,652
Andrew Cheung	2IN002	CI-Customer Assistance Programs	1,967	3,435	3,684
Andrew Cheung	2IN004	CI-Customer Segment Services	8,372	9,981	10,837
		CS - Information Total	15,523	20,514	22,174
Michael H. Baldwin	2OO000	CCC - Operations	30,143	29,872	32,551
Michael H. Baldwin	2OO001	CCC - Support	7,782	9,024	9,776
Michael H. Baldwin	2OO002	Branch Offices	11,591	12,011	13,042
Michael H. Baldwin	2OO003	Billing Services	6,967	6,264	6,826
Michael H. Baldwin	2OO004	Credit and Collections	5,216	5,103	5,449
Michael H. Baldwin	2OO005	Remittance Processing	21,939	18,021	18,338
Michael H. Baldwin	2OO006	Customer Service Other Office Ops and Technology	2,064	3,179	3,461
Michael H. Baldwin	2OO007	Measurement Data Ops (MDO)	1,313	1,042	1,134
		CS - Office Operations Total	87,015	84,516	90,576

Table KN-8
SOCALGAS
TEST YEAR 2019
CUSTOMER SERVICES
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Lisa M. Larroque	2RD001	Research Development and Demonstration (RD&D)	10,643	14,329	15,395
Lisa M. Larroque	2RD002	Policy & Environmental Solutions NSS	767	897	975
		CS - Technologies, Policies & Solutions Total	<u>11,410</u>	<u>15,226</u>	<u>16,370</u>
		Total NSS	<u>279,954</u>	<u>300,659</u>	<u>325,354</u>
Gwen R. Marelli	2200-0942	CS FIELD STAFF MANAGER	1,194	1,514	1,632
		CS - Field & Meter Reading Total	<u>1,194</u>	<u>1,514</u>	<u>1,632</u>
Andrew Cheung	2200-0234	CLEAN TRANSPORTATION BUSINESS DEVELOPMENT	833	2,158	2,326
Andrew Cheung	2200-2286	RENEWABLE GAS - MARKET DEVELOPMENT	423	954	1,028
Andrew Cheung	2200-2560	CLEAN TRANSPORTATION - BUS DEV	1,047	1,358	1,463
		CS - Information Total	<u>2,303</u>	<u>4,470</u>	<u>4,817</u>
Michael H. Baldwin	2200-0354	MAJOR MARKET CREDIT and COLLECTIONS	1,608	1,604	1,728
Michael H. Baldwin	2200-0355	PAYMENT PROCESSING	3,484	3,511	3,784
Michael H. Baldwin	2200-2247	MANAGER OF REMITTANCE PROCESSING	309	377	407
		CS - Office Operations Total	<u>5,401</u>	<u>5,492</u>	<u>5,918</u>
Lisa M. Larroque	2200-2229	BUSINESS STRATEGY AND DEVELOPMENT	1,190	1,500	1,616
Lisa M. Larroque	2200-2288	ENVIRONMENTAL AFFAIRS	512	647	697
Lisa M. Larroque	2200-2396	ENERGY & ENVIRONMENTAL POLICY	1,303	1,641	1,768
Lisa M. Larroque	2200-2504	PUBLIC POLICY & PLANNING	-	-	-
Lisa M. Larroque	2200-2505	PLANNING & LEGISLATIVE ANALYSIS	210	220	238
		CS - Technologies, Policies & Solutions Total	<u>3,215</u>	<u>4,008</u>	<u>4,319</u>
		Total SS	<u>12,113</u>	<u>15,484</u>	<u>16,687</u>
		Total Customer Services	<u>\$ 292,067</u>	<u>\$ 316,143</u>	<u>\$ 342,041</u>

Table KN-9
SOCALGAS
TEST YEAR 2019
INFORMATION TECHNOLOGY
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Christopher R. Olmsted	2IT001	IT Applications NSS	5,442	8,040	8,581
Christopher R. Olmsted	2IT002	IT Infrastructure NSS	8,368	14,677	15,680
Christopher R. Olmsted	2IT003	IT Support NSS	152	(1,640)	(1,853)
		Information Technology Total	<u>13,962</u>	<u>21,077</u>	<u>22,408</u>
		Total NSS	13,962	21,077	22,408
Christopher R. Olmsted	2200-2047	IT ACCOUNT MANAGEMENT	119	119	128
Christopher R. Olmsted	2200-2372	DIRECTOR IT SOCALGAS APPLICATIONS	250	251	270
Christopher R. Olmsted	2200-2406	DIRECTOR - COMPUTING INFRASTRUCTURE	383	383	412
Christopher R. Olmsted	2200-2418	DIRECTOR - SCG APPLICATIONS SERVICES	213	1,258	1,356
Christopher R. Olmsted	2200-2444	SCG SUPPLY CHAIN SERVICES	232	231	249
Christopher R. Olmsted	2200-2445	SCG WORK MANAGEMENT SERVICES	1,213	1,213	1,307
Christopher R. Olmsted	2200-2446	SCG GIS & CAD SERVICES	172	171	185
Christopher R. Olmsted	2200-2447	SCG SOFTWARE DEV - DATABASE	571	572	616
Christopher R. Olmsted	2200-2451	SCG APPS MAJ MRK APP - SCG	1,449	1,449	1,562
Christopher R. Olmsted	2200-2453	CLNT TECH & DEPOT SVC-SCG	328	328	354
Christopher R. Olmsted	2200-2455	IT BUSINESS INSIGHT - SCG	349	350	377
Christopher R. Olmsted	2200-2458	SCALABLE PLATFORM SERVS - SCG	477	478	515
Christopher R. Olmsted	2200-2463	CI OPERATIONS SERVICES SCG	-	0	0
Christopher R. Olmsted	2200-2464	CI COMPUTE SUPPORT SCG	1,039	1,039	1,120
Christopher R. Olmsted	2200-2466	CI COMPUTE PROVISIONING SCG	639	638	688
Christopher R. Olmsted	2200-2467	CI STANDARDS	511	511	551
Christopher R. Olmsted	2200-2470	SCG IT COMPLIANCE MANAGEMENT	697	697	751
Christopher R. Olmsted	2200-2490	ENTERPRISE ARCHITECTURE	264	264	284
Christopher R. Olmsted	2200-2493	IT PORTFOLIO MANAGEMENT	569	603	650
Christopher R. Olmsted	2200-2494	IT TELECOM PMO	131	276	297
Christopher R. Olmsted	2200-2495	IT PORTFOLIO MANAGEMENT	-	0	0
Christopher R. Olmsted	2200-2496	SCG IT ASSOCIATE PROGRAM	358	358	386
Christopher R. Olmsted	2200-2503	ARCHITECTURE AND INTEGRATION - SCG	528	528	569
Christopher R. Olmsted	2200-2565	IT TELECOM PMO	93	94	101
Christopher R. Olmsted	2200-2596	SCG IT QUALITY ASSURANCE	41	41	44
		Information Technology Total	<u>10,626</u>	<u>11,851</u>	<u>12,771</u>
Gavin H. Worden	2200-2469	IT INFORMATION SECURITY SCG	239	708	763
		Cyber Security Total	<u>239</u>	<u>708</u>	<u>763</u>
		Total SS	10,865	12,559	13,535
		Total Information Technology	<u>24,827</u>	<u>33,636</u>	<u>35,943</u>

Table KN-10
SOCALGAS
TEST YEAR 2019
SUPPORT SERVICES
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Darrell R. Johnson	2EV000	ENVIRONMENTAL	5,990	6,973	7,562
Darrell R. Johnson	2EV001	RNERBA-Subpart W	5,037	9,634	10,328
		Environmental Total	<u>11,027</u>	<u>16,607</u>	<u>17,891</u>
Denita A. Willoughby	2SS001	LOGISTICS & SHOPS - POOL WAREHOUSING	6,715	7,666	8,347
Denita A. Willoughby	2SS002	METER SHOP & RECORDS	1,756	2,417	2,627
Denita A. Willoughby	2SS003	FABRICATION & REPAIR	2,889	3,260	3,518
Denita A. Willoughby	2SS004	PROCUREMENT	1,425	(2,466)	(2,613)
Denita A. Willoughby	2SS005	SUPPLIER EXCELLENCE	1,112	1,266	1,369
Denita A. Willoughby	2SS006	OFFICE SERVICES	2,486	2,910	3,119
Denita A. Willoughby	2SS007	SUPPLIER DIVERSITY	687	1,051	1,135
Denita A. Willoughby	2SS008	PSEP PORTFOLIO MGMT	(15)	-	-
		Supply Management & Supplier Diversity Total	<u>17,055</u>	<u>16,104</u>	<u>17,503</u>
Carmen L. Herrera	2RF001	Director	67	115	125
Carmen L. Herrera	2RF002	Maintenance Operations	21,110	25,845	27,846
Carmen L. Herrera	2RF003	Maintenance Management	20,843	46,661	46,639
Carmen L. Herrera	2RF004	Facility Operations	15,103	17,465	18,798
		Fleet & Facilities Total	<u>57,123</u>	<u>90,086</u>	<u>93,408</u>
Richard D. Tattersall	2RE001	SCG RENTS	2,199	2,194	2,194
Richard D. Tattersall	2RE002	SCG CORPORATE REAL ESTATE	211	206	224
		Real Estate Total	<u>2,410</u>	<u>2,400</u>	<u>2,418</u>
		Total NSS	<u>87,615</u>	<u>125,197</u>	<u>131,219</u>
Darrell R. Johnson	2200-2012	SCG ENVIRONMENTAL SERVICE DIRECTOR	68	75	81
Darrell R. Johnson	2200-2176	SCG ENVIRONMENTAL PROGRAMS	258	284	306
Darrell R. Johnson	2200-2554	TECH SUPP-AIR QUAL	398	277	299
		Environmental Total	<u>724</u>	<u>636</u>	<u>685</u>
Denita A. Willoughby	2200-2562	VP SUPPLY MANAGEMENT & LOGISTICS	328	334	360
Denita A. Willoughby	2200-2573	SUPPLY CHAIN POLICY & INTEGRATION	165	186	201
		Supply Management & Supplier Diversity Total	<u>493</u>	<u>521</u>	<u>561</u>
Carmen L. Herrera	2200-0696	FACILITIES-MONTEREY PARK MGR	2,301	2,332	2,513
Carmen L. Herrera	2200-0735	FACILITIES GCT	1,200	1,513	1,631
Carmen L. Herrera	2200-2018	FLEET MANAGEMENT & SUPPORT	1,955	2,261	2,437
Carmen L. Herrera	2200-2148	FLEET SERVICES DIRECTOR - SCG	281	239	257
		Fleet & Facilities Total	<u>5,737</u>	<u>6,345</u>	<u>6,838</u>
Richard D. Tattersall	2200-0618	GCT RENTS	10,213	17,599	17,599
Richard D. Tattersall	2200-2284	SCG MICROWAVE RENTS	1,447	1,511	1,511
		Real Estate Total	<u>11,660</u>	<u>19,110</u>	<u>19,110</u>
		Total SS	<u>18,614</u>	<u>26,611</u>	<u>27,194</u>
		Total Support Services	<u>\$ 106,229</u>	<u>\$ 151,808</u>	<u>\$ 158,413</u>

Table KN-11
SOCALGAS
TEST YEAR 2019
ADMINISTRATIVE AND GENERAL
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Stacey Lee	2AG001	INCIDENT SUPPORT & ANALYSIS	-	1,101	1,198
Stacey Lee	2AG002	ACCOUNTING OPERATIONS	3,785	3,755	4,085
Stacey Lee	2AG003	ACCOUNTING SYSTEMS & COMPLIANCE	1,084	1,154	1,254
Stacey Lee	2AG004	FINANCE	1,549	1,437	1,565
Stacey Lee	2AG005	FINANCIAL & OPERATIONAL PLANNING	3,603	3,764	4,098
Stacey Lee	2AG007	LEGAL	6,651	6,967	7,586
Stacey Lee	2AG008	REGULATORY TARIFFS & INFO	662	(80)	(27)
Stacey Lee	2AG010	CLAIMS PAYMENTS AND RECOVERY	14,434	7,401	7,932
Stacey Lee	2AG011	EXTERNAL AFFAIRS	1,864	1,976	2,147
Stacey Lee	2AG013	VP - ACCOUNTING & FINANCE	303	352	383
		A&G - Accounting & Finance, Legal, Reg Affairs & Ext Affairs Total	33,935	27,827	30,221
Debbie S. Robinson	2CP000	COMPENSATION - VARIABLE PAY (GRC USE ONLY)	74,806	90,743	97,941
Debbie S. Robinson	2PB000	HEALTH BENEFITS - MEDICAL	114,478	137,373	137,373
		A&G - Compensation & Benefits Total	189,284	228,116	235,314
Mary Gevorkian	2HR001	SCG CEO President & COO and Chief of Human Resources & CAO	2,758	2,758	2,987
Mary Gevorkian	2HR002	SCG Business Partners	1,862	1,943	2,115
Mary Gevorkian	2HR003	SCG Manager Perf & Orgnl Strategy	1,160	1,532	1,669
Mary Gevorkian	2HR004	SCG Director HR Services	3,913	5,218	5,676
Mary Gevorkian	2HR005	SCG Director Labor Relations	821	1,025	1,112
Mary Gevorkian	2HR006	SCG Director Safety & Wellness	21,531	32,953	33,818
Mary Gevorkian	2HR007	SCG Director Org Effectiveness	2,160	3,823	4,149
		A&G - HR, Disability, Workers Comp & Safety Total	34,205	49,252	51,526
Debbie S. Robinson	2PN000	EMPLOYEE PENSION	70,621	202,830	202,830
		A&G - Pension & Other Post Retirement Benefits Total	70,621	202,830	202,830
Mia L. DeMontigny	2SE000	SECC OUTSIDE SERVICES EMPLOYEES - F923.1	60,270	74,709	74,709
		A&G - Sempra Corp General Total	60,270	74,709	74,709
Neil K. Cayabyab	2SN000	SECC PROPERTY INSURANCE NON-NUCLEAR - 924.0	36,184	38,560	38,560
		A&G - Sempra Corp Insurance Total	36,184	38,560	38,560
		Total NSS	424,499	621,294	633,160

Table KN-11
SOCALGAS
TEST YEAR 2019
ADMINISTRATIVE AND GENERAL
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Stacey Lee	2200-1334	AFFILIATE BILLING & COSTING NORTH	373	391	421
Stacey Lee	2200-2075	REGULATORY CASE MANAGEMENT	717	1,094	1,179
Stacey Lee	2200-2095	CLAIMS MANAGEMENT - NORTH	1,304	1,579	1,702
Stacey Lee	2200-2186	VP - CONTROLLER & CFO	695	551	593
Stacey Lee	2200-2305	DIRECTOR - REGULATORY AFFAIRS SCG	186	215	232
Stacey Lee	2200-2307	GAS RATES ANALYSIS	171	322	347
Stacey Lee	2200-2308	GAS FORECASTING & ANALYSIS	805	877	945
Stacey Lee	2200-2462	GRC & REVENUE REQUIREMENTS	825	1,304	1,406
Stacey Lee	2200-2489	CLIENT SUPPORT-SS	74	55	59
Stacey Lee	2200-2575	ASSISTANT CONTROLLER	-	335	361
		A&G - Accounting & Finance, Legal, Reg Affairs & Ext Affairs Total	5,150	6,723	7,245
Diana L. Day	2200-2547	OPER RISK MGMT-SCG	292	292	315
		A&G - Risk Management Total	292	292	315
Mary Gevorkian	2200-2337	HR DIVERSITY-SCG	409	557	600
Mary Gevorkian	2200-2397	ECS System Reporting	281	139	150
Mary Gevorkian	2200-2398	ECS Operations	542	543	585
Mary Gevorkian	2200-2399	ECS Regulations & Training	428	429	462
		A&G - HR, Disability, Workers Comp & Safety Total	1,660	1,668	1,798
		Total SS	7,102	8,683	9,358
		Total A&G	\$ 431,601	\$ 629,977	\$ 642,518

Table KN-12
SOCALGAS
TEST YEAR 2019
PIPELINE SAFETY ENHANCEMENT PROGRAM
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Richard D. Phillips	2PS000	PIPELINE SAFETY ENHANCEMENT PROGRAM	4,956	83,156	89,226
		PSEP Total	4,956	83,156	89,226
		Total NSS	4,956	83,156	89,226
		Total SS	-	-	-
		Total PSEP	\$ 4,956	\$ 83,156	\$ 89,226

Table KN-13
SOCALGAS
Working Cash Adjustment to Rate Base (Net Working Cash Requirement)
(\$ in Thousands)

Line No.	Description	2016 Recorded			2019 Proposed		
		Expenses	Average No. of Days Lag	Dollar-Days Lag	Expenses	Average No. of Days Lag	Dollar-Days Lag
1	Commodities - Gas	956,791	41.58	39,783,388	980,961	41.58	40,788,366
2	Payroll Expense	597,759	13.05	7,799,671			
3	F. I. C. A	43,071	12.38	533,422			
4	Federal/State Unemployment Insurance	1,775	76.05	135,002			
5	Incentive Compensation Plan	39,175	257.50	10,087,678			
6	Employee Benefits	228,922	16.54	3,786,372			
7	Goods & Services	586,584	36.56	21,445,520			
8	Corporate Charges	97,389	21.29	2,073,860			
9	Real Estate Rental	16,133	(21.28)	(343,308)			
10	Materials Issued from Stores	12,954	0.00	0			
11	Property/Ad Valorem/Franchise Taxes	257,358	87.06	22,405,603			
12	Federal Income Taxes - Current	(745)	(255.20)	190,181			
13	State Income Taxes - Current	41,807	(66.25)	(2,769,701)			
14	Income Taxes Deferred	60,295	0.00	0			
15	Depreciation Provision	463,398	0.00	0			
16	Amortization of Insurance Premiums	30,108	0.00	0			
17	Sub-total	2,475,985	26.39	65,344,301	3,015,724	26.39	79,588,701
18	Total Expenses Incl. Commodities	3,432,776	30.62	105,127,689	3,996,686	30.12	120,377,068
19	Revenue Lag Days		44.35			44.35	
20	Expense Lag Days (Line 18, Dollar-Days Lag / Expenses)		30.62			30.12	
21	Excess Lag Days (Line 19 - Line 20)		13.72			14.23	
22	Total Expenses Incl. Commodities (Line 18 Expenses)		3,432,776			3,996,686	
23	Lead/Lag Working Capital (Line 21 * Line 22 / 365)		129,079			155,817	
24	Operational Cash Requirement		227,768			245,465	
25	Working Capital Not Supplied by Investors		(231,699)			(249,702)	
26	Working Cash Adjustment to Rate Base (Line 23 to Line 25)		125,147			151,580	

Table KN-14
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

ATTACHMENT B

SDG&E Summary of Earnings Tables

Table KN-1
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
COMBINED SUMMARY OF EARNINGS
(Thousands of Dollars)

Line No.	Description	2019 Present Rates (2019\$)	2019 Proposed Rates (2019\$)
1	Base Margin	1,961,947	2,185,010
2	Miscellaneous Revenues	20,058	17,524
3	Revenue Requirement	1,982,005	2,202,534
	<u>OPERATING & MAINTENANCE EXPENSES</u>		
4	Distribution	197,718	197,718
5	Gas Transmission	6,668	6,668
6	PSEP	-	-
7	Generation	63,412	63,412
8	Engineering	11,000	11,000
9	Procurement	8,641	8,641
10	Customer Services	94,484	94,484
11	Information Technology	96,357	96,357
12	Support Services	98,514	98,514
13	Administrative and General	541,787	541,787
14	Subtotal (2016\$)	1,118,580	1,118,580
15	Shared Services Adjustments	(17,953)	(17,953)
16	Reassignments	(183,424)	(183,424)
17	FERC Transmission Costs	(82,024)	(82,024)
18	Escalation	35,093	35,093
19	Uncollectibles	3,414	3,802
20	Franchise Fees	63,192	69,351
21	Total O&M (2019\$)	936,878	943,425
22	Depreciation & Amortization	562,538	562,538
23	Taxes on Income	16,229	80,058
24	Taxes Other Than on Income	122,963	122,963
25	Total Operating Expenses	1,638,608	1,708,984
26	Return	343,397	493,549
27	Rate Base	6,533,308	6,537,077
28	Rate of Return	5.26%	7.55%

Table KN-2
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
ELECTRIC SUMMARY OF EARNINGS
(Thousands of Dollars)

Line No.	Description	2019	2019
		Present Rates (2019\$)	Proposed Rates (2019\$)
1	Base Margin	\$ 1,637,656	\$ 1,748,836
2	Miscellaneous Revenues	15,852	14,672
3	Revenue Requirement	\$ 1,653,508	\$ 1,763,508
<u>OPERATING & MAINTENANCE EXPENSES</u>			
4	Distribution	161,113	161,113
5	Gas Transmission	-	-
6	PSEP	-	-
7	Generation	63,131	63,131
8	Engineering	-	-
9	Procurement	8,641	8,641
10	Customer Services	59,447	59,447
11	Information Technology	71,478	71,478
12	Support Services	76,652	76,652
13	Administrative and General	431,146	431,146
14	Subtotal (2016\$)	871,608	871,608
15	Shared Services Adjustments	(24,313)	(24,313)
16	Reassignments	(142,375)	(142,375)
17	FERC Transmission Costs	(82,024)	(82,024)
18	Escalation	24,882	24,882
19	Uncollectibles (0.174%)	2,850	3,043
20	Franchise Fees (3.4468%)	56,447	60,279
21	Total O&M (2019\$)	707,075	711,101
22	Depreciation & Amortization	476,150	476,150
23	Taxes on Income	31,969	63,579
24	Taxes Other Than on Income	100,648	100,648
25	Total Operating Expenses	\$ 1,315,842	\$ 1,351,478
26	Return	337,666	412,031
27	Rate Base	5,455,343	5,457,360
28	Rate of Return	6.19%	7.55%

Table KN-3
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
ELECTRIC DISTRIBUTION SUMMARY OF EARNINGS
(Thousands of Dollars)

Line No.	Description	2019 Present Rates (2019\$)	2019 Proposed Rates (2019\$)
1	Base Margin	\$ 1,318,209	\$ 1,476,677
2	Miscellaneous Revenues	15,852	14,672
3	Revenue Requirement	\$ 1,334,061	\$ 1,491,349
	<u>OPERATING & MAINTENANCE EXPENSES</u>		
4	Distribution	160,217	160,217
5	Gas Transmission	-	-
6	PSEP	-	-
7	Generation	804	804
8	Engineering	-	-
9	Procurement	8,641	8,641
10	Customer Services	59,235	59,235
11	Information Technology	67,609	67,609
12	Support Services	74,261	74,261
13	Administrative and General	405,151	405,151
14	Subtotal (2016\$)	775,918	775,918
15	Shared Services Adjustments	(22,666)	(22,666)
16	Reassignments	(136,580)	(136,580)
17	FERC Transmission Costs	(82,024)	(82,024)
18	Escalation	20,687	20,687
19	Uncollectibles	2,294	2,569
20	Franchise Fees	45,436	50,898
21	Total O&M (2019\$)	603,065	608,802
22	Depreciation & Amortization	410,642	410,642
23	Taxes on Income	(1,469)	43,741
24	Taxes Other Than on Income	85,103	85,103
25	Total Operating Expenses	\$ 1,097,340	\$ 1,148,288
26	Return	236,721	343,061
27	Rate Base	\$ 4,540,809	\$ 4,543,856
28	Rate of Return	5.21%	7.55%

Table KN-4
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
GENERATION SUMMARY OF EARNINGS
(Thousands of Dollars)

Line No.	Description	2019	2019
		Present Rates (2019\$)	Proposed Rates (2019\$)
1	Base Margin	\$ 319,447	\$ 272,159
2	Miscellaneous Revenues	-	-
3	Revenue Requirement	\$ 319,447	\$ 272,159
<u>OPERATING & MAINTENANCE EXPENSES</u>			
4	Distribution	896	896
5	Gas Transmission	-	-
6	PSEP	-	-
7	Generation	62,327	62,327
8	Engineering	-	-
9	Procurement	-	-
10	Customer Services	212	212
11	Information Technology	3,869	3,869
12	Support Services	2,391	2,391
13	Administrative and General	25,995	25,995
14	Subtotal (2016\$)	95,690	95,690
15	Shared Services Adjustments	(1,647)	(1,647)
16	Reassignments	(5,795)	(5,795)
17	FERC Transmission Costs	-	-
18	Escalation	4,195	4,195
19	Uncollectibles	556	474
20	Franchise Fees	11,011	9,381
21	Total O&M (2019\$)	104,010	102,298
22	Depreciation & Amortization	65,508	65,508
23	Taxes on Income	33,438	19,838
24	Taxes Other Than on Income	15,545	15,545
25	Total Operating Expenses	\$ 218,502	\$ 203,190
26	Return	100,945	68,970
27	Rate Base	\$ 914,533	\$ 913,504
28	Rate of Return	11.04%	7.55%

Table KN-5
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
GAS SUMMARY OF EARNINGS
(Thousands of Dollars)

Line No.	Description	2019	2019
		Present Rates (2019\$)	Proposed Rates (2019\$)
1	Base Margin	\$ 324,291	\$ 436,174
2	Miscellaneous Revenues	4,206	2,851
3	Revenue Requirement	\$ 328,497	\$ 439,025
<u>OPERATING & MAINTENANCE EXPENSES</u>			
4	Distribution	36,605	36,605
5	Gas Transmission	6,668	6,668
6	PSEP	-	-
7	Generation	280	280
8	Engineering	11,000	11,000
9	Procurement	-	-
10	Customer Services	35,036	35,036
11	Information Technology	24,879	24,879
12	Support Services	21,862	21,862
13	Administrative and General	110,641	110,641
14	Subtotal (2016\$)	246,971	246,971
15	Shared Services Adjustments	6,360	6,360
16	Reassignments	(41,049)	(41,049)
17	FERC Transmission Costs		
18	Escalation	10,211	10,211
19	Uncollectibles (0.174%)	564	759
20	Franchise Fees (2.0799%)	6,745	9,072
21	Total O&M (2019\$)	229,803	232,324
22	Depreciation & Amortization	86,388	86,388
23	Taxes on Income	(15,739)	16,479
24	Taxes Other Than on Income	22,315	22,315
25	Total Operating Expenses	\$ 322,767	\$ 357,507
26	Return	5,730	81,519
27	Rate Base	1,077,965	1,079,717
28	Rate of Return	0.53%	7.55%

Table KN-6
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019

(Thousands of Dollars)

Line No.	Description	2019	2019	2019
		Non-Shared Services Proposed Rates (2016\$)	Shared Services Proposed Rates (2016\$)	Total Proposed Rates (2016\$)
1	Base Margin			
2	Miscellaneous Revenues			
3	Revenue Requirement			
	<u>OPERATING & MAINTENANCE EXPENSES</u>			
4	Distribution	197,718	-	197,718
5	Gas Transmission	6,068	600	6,668
6	PSEP	-	-	-
7	Generation	62,317	1,095	63,412
8	Engineering	11,000	-	11,000
9	Procurement	8,641	-	8,641
10	Customer Services	94,140	344	94,484
11	Information Technology	29,741	66,616	96,357
12	Support Services	84,256	14,258	98,514
13	Administrative and General	516,582	25,205	541,787
14	Subtotal (2016\$)	1,010,463	108,117	1,118,580
A	Shared Services Billed Out	0	(47,970)	(47,970)
B	Shared Services Billed In	0	19,312	19,312
C	Shared Services Overhead Credit	0	(23,480)	(23,480)
D	Shared Services Billed In Overheads	0	16,394	16,394
E	Corporate Reallocation	1,987	-	1,987
F	Subtotal	1,987	(35,743)	(33,756)
G	Shared Asset Expense	53,920	-	53,920
H	Billed Capital Overhead Credit	0	(38,117)	(38,117)
I	SOP 98 Expense	-	0	-
15	Total Shared Service Adjustments	55,907	(73,860)	(17,953)
16	Total	1,066,370	34,257	1,100,627

Table KN-7
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
DISTRIBUTION COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
William Speer	1ED001	Reliability & Capacity	244	340	363
William Speer	1ED002	Construction Services	5,363	18,936	20,192
William Speer	1ED003	DistOps Enterprise Geographic Information System Standards	1,379	1,253	1,361
William Speer	1ED004	Electric Distribution Operations	15,589	22,546	24,080
William Speer	1ED006	Kearny Operations Services	1,350	2,133	2,315
William Speer	1ED008	Grid Operations	667	567	611
William Speer	1ED009	Officer	772	772	837
William Speer	1ED010	Project Management	659	1,346	1,457
William Speer	1ED011	Electric Regional Operations	35,613	46,639	50,171
William Speer	1ED013	Skills & Compliance Training	4,133	4,661	5,049
William Speer	1ED014	Service Order Team (SOT)	161	161	173
William Speer	1ED015	Substation C&O	4,582	5,285	5,706
William Speer	1ED017	System Protection	1,459	1,861	2,015
William Speer	1ED018	Distribution and Engineering	2,342	4,175	4,471
William Speer	1ED019	Asset Management	-	4,610	4,989
William Speer	1ED020	Troubleshooting	7,897	7,797	8,465
William Speer	1ED021	Vegetation Management (Pole Brushing)	26,456	26,415	28,156
William Speer	1ED022	Regional Public Affairs	1,964	1,802	1,935
William Speer	1ED023	Major Projects	119	110	118
William Speer	1ED024	Technology Utilization	1,042	1,226	1,326
William Speer	1ED025	Compliance Management	2,695	2,857	3,065
William Speer	1ED026	Tech Solutions and Reliability	2,544	3,260	3,516
William Speer	1ED027	Emergency Management	2,503	5,344	5,725
William Speer	1ED028	Strategic Planning and Business Optimization	1,630	2,390	2,575
William Speer	1ED030	Distributed Energy Resources	1,304	1,699	1,813
		Total	122,467	168,185	180,485
Gina Orozco-Mejia	1GD000	Field O&M - Other Services	14,419	16,350	17,676
Gina Orozco-Mejia	1GD001	Asset Management	1,718	2,168	2,341
Gina Orozco-Mejia	1GD002	Measurement & Regulation	3,873	4,216	4,562
Gina Orozco-Mejia	1GD003	Cathodic Protection	1,829	2,289	2,483
Gina Orozco-Mejia	1GD004	Operations Management & Training	3,939	4,510	4,869
		Total	25,778	29,533	31,932
		Total NSS	148,245	197,718	212,417
		Total	-	-	-
		Total SS	-	-	-
		Total Distribution	\$ 148,245	\$ 197,718	\$ 212,417

Table KN-8
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
DISTRIBUTION ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
William Speer	1ED001	Reliability & Capacity	239	334	356
William Speer	1ED002	Construction Services	5,063	17,877	19,063
William Speer	1ED003	DistOps Enterprise Geographic Information System Standards	1,379	1,253	1,361
William Speer	1ED004	Electric Distribution Operations	13,772	19,918	21,273
William Speer	1ED006	Kearny Operations Services	1,036	1,637	1,777
William Speer	1ED008	Grid Operations	667	567	611
William Speer	1ED009	Officer	590	590	640
William Speer	1ED010	Project Management	659	1,346	1,457
William Speer	1ED011	Electric Regional Operations	34,293	44,910	48,311
William Speer	1ED013	Skills & Compliance Training	3,762	4,242	4,596
William Speer	1ED014	Service Order Team (SOT)	146	146	157
William Speer	1ED015	Substation C&O	4,390	5,064	5,467
William Speer	1ED017	System Protection	1,439	1,836	1,988
William Speer	1ED018	Distribution and Engineering	2,292	4,085	4,375
William Speer	1ED019	Asset Management	-	3,471	3,756
William Speer	1ED020	Troubleshooting	7,897	7,797	8,465
William Speer	1ED021	Vegetation Management (Pole Brushing)	26,456	26,415	28,156
William Speer	1ED022	Regional Public Affairs	1,497	1,374	1,475
William Speer	1ED023	Major Projects	100	92	99
William Speer	1ED024	Technology Utilization	912	1,073	1,161
William Speer	1ED025	Compliance Management	2,695	2,857	3,065
William Speer	1ED026	Tech Solutions and Reliability	2,350	3,012	3,248
William Speer	1ED027	Emergency Management	2,203	4,704	5,039
William Speer	1ED028	Strategic Planning and Business Optimization	1,227	1,800	1,939
William Speer	1ED030	Distributed Energy Resources	1,166	1,520	1,622
		Total	116,231	157,919	169,457
Gina Orozco-Mejia	1GD000	Field O&M - Other Services	2,831	3,194	3,439
Gina Orozco-Mejia	1GD001	Asset Management	-	-	-
Gina Orozco-Mejia	1GD002	Measurement & Regulation	-	-	-
Gina Orozco-Mejia	1GD003	Cathodic Protection	-	-	-
Gina Orozco-Mejia	1GD004	Operations Management & Training	-	-	-
		Total	2,831	3,194	3,439
		Total NSS	119,062	161,113	172,896
		Total	-	-	-
		Total SS	-	-	-
		Total Distribution Electric Department	\$ 119,062	\$ 161,113	\$ 172,896

Table KN-9
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
DISTRIBUTION ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
William Speer	1ED001	Reliability & Capacity	239	333	356
William Speer	1ED002	Construction Services	5,049	17,829	19,012
William Speer	1ED003	DistOps Enterprise Geographic Information System Standards	1,379	1,253	1,361
William Speer	1ED004	Electric Distribution Operations	13,671	19,772	21,117
William Speer	1ED006	Kearny Operations Services	1,035	1,635	1,774
William Speer	1ED008	Grid Operations	667	567	611
William Speer	1ED009	Officer	557	557	604
William Speer	1ED010	Project Management	659	1,346	1,457
William Speer	1ED011	Electric Regional Operations	34,260	44,868	48,265
William Speer	1ED013	Skills & Compliance Training	3,762	4,242	4,596
William Speer	1ED014	Service Order Team (SOT)	144	144	154
William Speer	1ED015	Substation C&O	4,389	5,063	5,466
William Speer	1ED017	System Protection	1,439	1,836	1,987
William Speer	1ED018	Distribution and Engineering	2,292	4,085	4,375
William Speer	1ED019	Asset Management	-	3,264	3,532
William Speer	1ED020	Troubleshooting	7,897	7,797	8,465
William Speer	1ED021	Vegetation Management (Pole Brushing)	26,456	26,415	28,156
William Speer	1ED022	Regional Public Affairs	1,416	1,299	1,395
William Speer	1ED023	Major Projects	97	89	96
William Speer	1ED024	Technology Utilization	888	1,045	1,131
William Speer	1ED025	Compliance Management	2,695	2,857	3,065
William Speer	1ED026	Tech Solutions and Reliability	2,315	2,966	3,199
William Speer	1ED027	Emergency Management	2,148	4,587	4,914
William Speer	1ED028	Strategic Planning and Business Optimization	1,154	1,692	1,823
William Speer	1ED030	Distributed Energy Resources	1,141	1,487	1,587
		Total	115,750	157,028	168,499
Gina Orozco-Mejia	1GD000	Field O&M - Other Services	2,826	3,189	3,435
Gina Orozco-Mejia	1GD001	Asset Management	-	-	-
Gina Orozco-Mejia	1GD002	Measurement & Regulation	-	-	-
Gina Orozco-Mejia	1GD003	Cathodic Protection	-	-	-
Gina Orozco-Mejia	1GD004	Operations Management & Training	-	-	-
		Total	2,826	3,189	3,435
		Total NSS	118,576	160,217	171,933
		Total	-	-	-
		Total SS	-	-	-
		Total Distribution Electric Distribution	\$ 118,576	\$ 160,217	\$ 171,933

Table KN-10
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
DISTRIBUTION GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
William Speer	1ED001	Reliability & Capacity	0	0	0
William Speer	1ED002	Construction Services	14	48	52
William Speer	1ED003	DistOps Enterprise Geographic Information System Standards	-	-	-
William Speer	1ED004	Electric Distribution Operations	101	146	156
William Speer	1ED006	Kearny Operations Services	1	2	2
William Speer	1ED008	Grid Operations	-	-	-
William Speer	1ED009	Officer	33	33	36
William Speer	1ED010	Project Management	-	-	-
William Speer	1ED011	Electric Regional Operations	32	42	45
William Speer	1ED013	Skills & Compliance Training	-	-	-
William Speer	1ED014	Service Order Team (SOT)	3	3	3
William Speer	1ED015	Substation C&O	1	1	1
William Speer	1ED017	System Protection	0	0	0
William Speer	1ED018	Distribution and Engineering	-	-	-
William Speer	1ED019	Asset Management	-	207	224
William Speer	1ED020	Troubleshooting	-	-	-
William Speer	1ED021	Vegetation Management (Pole Brushing)	-	-	-
William Speer	1ED022	Regional Public Affairs	82	75	80
William Speer	1ED023	Major Projects	3	3	3
William Speer	1ED024	Technology Utilization	24	28	30
William Speer	1ED025	Compliance Management	-	-	-
William Speer	1ED026	Tech Solutions and Reliability	35	45	49
William Speer	1ED027	Emergency Management	55	117	125
William Speer	1ED028	Strategic Planning and Business Optimization	73	108	116
William Speer	1ED030	Distributed Energy Resources	25	33	35
		Total	482	891	958
Gina Orozco-Mejia	1GD000	Field O&M - Other Services	4	5	5
Gina Orozco-Mejia	1GD001	Asset Management	-	-	-
Gina Orozco-Mejia	1GD002	Measurement & Regulation	-	-	-
Gina Orozco-Mejia	1GD003	Cathodic Protection	-	-	-
Gina Orozco-Mejia	1GD004	Operations Management & Training	-	-	-
		Total	4	5	5
		Total NSS	486	896	963
		Total	-	-	-
		Total SS	-	-	-
		Total Distribution Generation	\$ 486	\$ 896	\$ 963

Table KN-11
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
DISTRIBUTION GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
William Speer	1ED001	Reliability & Capacity	5	6	7
William Speer	1ED002	Construction Services	300	1,059	1,129
William Speer	1ED003	DistOps Enterprise Geographic Information System Standards	-	-	-
William Speer	1ED004	Electric Distribution Operations	1,817	2,628	2,807
William Speer	1ED006	Kearny Operations Services	314	496	538
William Speer	1ED008	Grid Operations	-	-	-
William Speer	1ED009	Officer	182	182	197
William Speer	1ED010	Project Management	-	-	-
William Speer	1ED011	Electric Regional Operations	1,320	1,729	1,860
William Speer	1ED013	Skills & Compliance Training	371	419	453
William Speer	1ED014	Service Order Team (SOT)	15	15	16
William Speer	1ED015	Substation C&O	192	221	239
William Speer	1ED017	System Protection	20	25	27
William Speer	1ED018	Distribution and Engineering	50	90	96
William Speer	1ED019	Asset Management	-	1,139	1,232
William Speer	1ED020	Troubleshooting	-	-	-
William Speer	1ED021	Vegetation Management (Pole Brushing)	-	-	-
William Speer	1ED022	Regional Public Affairs	467	428	460
William Speer	1ED023	Major Projects	19	18	19
William Speer	1ED024	Technology Utilization	130	153	166
William Speer	1ED025	Compliance Management	-	-	-
William Speer	1ED026	Tech Solutions and Reliability	194	248	268
William Speer	1ED027	Emergency Management	300	640	686
William Speer	1ED028	Strategic Planning and Business Optimization	403	590	636
William Speer	1ED030	Distributed Energy Resources	138	179	191
		Total	6,236	10,266	11,028
Gina Orozco-Mejia	1GD000	Field O&M - Other Services	11,588	13,156	14,237
Gina Orozco-Mejia	1GD001	Asset Management	1,718	2,168	2,341
Gina Orozco-Mejia	1GD002	Measurement & Regulation	3,873	4,216	4,562
Gina Orozco-Mejia	1GD003	Cathodic Protection	1,829	2,289	2,483
Gina Orozco-Mejia	1GD004	Operations Management & Training	3,939	4,510	4,869
		Total	22,947	26,339	28,493
		Total NSS	29,183	36,605	39,521
		Total	-	-	-
		Total SS	-	-	-
		Total Distribution Gas	\$ 29,183	\$ 36,605	\$ 39,521

Table KN-12
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
GAS TRANSMISSION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Elizabeth A. Musich	1GT000	Pipeline Operations	1,342	1,839	1,983
Elizabeth A. Musich	1GT001	Compression Station Operations	2,981	3,123	3,361
Elizabeth A. Musich	1GT002	Technical Services	47	148	160
		Total	<u>4,370</u>	<u>5,110</u>	<u>5,505</u>
Omar Rivera	1SI000	GAS CONTRACTOR CONTROLS	-	127	138
Omar Rivera	1SI002	PIPELINE SAFETY & COMPLIANCE	31	106	115
Omar Rivera	1SI003	DAMAGE PREVENTION AND PUBLIC AWARENESS	120	725	772
		Total	<u>151</u>	<u>958</u>	<u>1,025</u>
		Total NSS	<u>4,521</u>	<u>6,068</u>	<u>6,529</u>
Omar Rivera	2100-3563	CODES STANDARDS AND RECORDS	-	600	641
		Total SS	<u>-</u>	<u>600</u>	<u>641</u>
		Total Gas Transmission	<u>\$ 4,521</u>	<u>\$ 6,668</u>	<u>\$ 7,171</u>

Table KN-13
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
GENERATION COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Daniel S. Baerman	1EG001	Generation - Plant - Admin	349	349	379
Daniel S. Baerman	1EG002	Generation Plant Miramar	1,415	2,380	2,542
Daniel S. Baerman	1EG003	Generation Plant Palomar	17,583	18,556	19,839
Daniel S. Baerman	1EG004	Electric Project Development	63	121	131
Daniel S. Baerman	1EG005	Generation Plant Otay Mesa	-	22,796	24,273
Daniel S. Baerman	1EG006	Generation Plant Desert Star	14,419	15,561	16,283
Daniel S. Baerman	1EG007	Generation Plant Cuyamaca Peak	1,370	1,078	1,153
Daniel S. Baerman	1EG010	EG -SONGS Wkp_Grp_2	1,239	1,476	1,476
		Total	<u>36,438</u>	<u>62,317</u>	<u>66,076</u>
		Total NSS	<u>36,438</u>	<u>62,317</u>	<u>66,076</u>
Daniel S. Baerman	2100-3433	RESOURCE PLANNING DIRECTOR	746	1,095	1,169
		Electric Generation Total	<u>746</u>	<u>1,095</u>	<u>1,169</u>
		Total SS	<u>746</u>	<u>1,095</u>	<u>1,169</u>
		Total Generation Combined	<u>\$ 37,184</u>	<u>\$ 63,412</u>	<u>\$ 67,246</u>

Table KN-14
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
GENERATION ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Daniel S. Baerman	1EG001	Generation - Plant - Admin	349	349	379
Daniel S. Baerman	1EG002	Generation Plant Miramar	1,415	2,380	2,542
Daniel S. Baerman	1EG003	Generation Plant Palomar	17,583	18,556	19,839
Daniel S. Baerman	1EG004	Electric Project Development	58	111	121
Daniel S. Baerman	1EG005	Generation Plant Otay Mesa	-	22,796	24,273
Daniel S. Baerman	1EG006	Generation Plant Desert Star	14,419	15,561	16,283
Daniel S. Baerman	1EG007	Generation Plant Cuyamaca Peak	1,370	1,078	1,153
Daniel S. Baerman	1EG010	EG -SONGS Wkp_Grp_2	1,239	1,476	1,476
		Total	<u>36,433</u>	<u>62,307</u>	<u>66,065</u>
		Total NSS	<u>36,433</u>	<u>62,307</u>	<u>66,065</u>
Daniel S. Baerman	2100-3433	RESOURCE PLANNING DIRECTOR	562	824	881
		Total	<u>562</u>	<u>824</u>	<u>881</u>
		Total SS	<u>562</u>	<u>824</u>	<u>881</u>
		Total Generation Electric Department	<u>\$ 36,995</u>	<u>\$ 63,131</u>	<u>\$ 66,946</u>

Table KN-15
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
GENERATION ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Daniel S. Baerman	1EG001	Generation - Plant - Admin	-	-	-
Daniel S. Baerman	1EG002	Generation Plant Miramar	-	-	-
Daniel S. Baerman	1EG003	Generation Plant Palomar	-	-	-
Daniel S. Baerman	1EG004	Electric Project Development	15	29	31
Daniel S. Baerman	1EG005	Generation Plant Otay Mesa	-	-	-
Daniel S. Baerman	1EG006	Generation Plant Desert Star	-	-	-
Daniel S. Baerman	1EG007	Generation Plant Cuyamaca Peak	-	-	-
Daniel S. Baerman	1EG010	EG -SONGS Wkp_Grp_2	-	-	-
		Total	<u>15</u>	<u>29</u>	<u>31</u>
		Total NSS	<u>15</u>	<u>29</u>	<u>31</u>
Daniel S. Baerman	2100-3433	RESOURCE PLANNING DIRECTOR	528	775	828
		Total	<u>528</u>	<u>775</u>	<u>828</u>
		Total SS	<u>528</u>	<u>775</u>	<u>828</u>
		Total Generation Electric Distribution	<u>\$ 543</u>	<u>\$ 804</u>	<u>\$ 859</u>

Table KN-16
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Daniel S. Baerman	1EG001	Generation - Plant - Admin	349	349	379
Daniel S. Baerman	1EG002	Generation Plant Miramar	1,415	2,380	2,542
Daniel S. Baerman	1EG003	Generation Plant Palomar	17,583	18,556	19,839
Daniel S. Baerman	1EG004	Electric Project Development	43	82	89
Daniel S. Baerman	1EG005	Generation Plant Otay Mesa	-	22,796	24,273
Daniel S. Baerman	1EG006	Generation Plant Desert Star	14,419	15,561	16,283
Daniel S. Baerman	1EG007	Generation Plant Cuyamaca Peak	1,370	1,078	1,153
Daniel S. Baerman	1EG010	EG -SONGS Wkp_Grp_2	1,239	1,476	1,476
		Total	<u>36,418</u>	<u>62,278</u>	<u>66,034</u>
		Total NSS	<u>36,418</u>	<u>62,278</u>	<u>66,034</u>
Daniel S. Baerman	2100-3433	RESOURCE PLANNING DIRECTOR	34	49	53
		Total	<u>34</u>	<u>49</u>	<u>53</u>
		Total SS	<u>34</u>	<u>49</u>	<u>53</u>
		Total Generation Gen	<u>\$ 36,451</u>	<u>\$ 62,327</u>	<u>\$ 66,087</u>

Table KN-17
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
GENERATION GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Daniel S. Baerman	1EG001	Generation - Plant - Admin	-	-	-
Daniel S. Baerman	1EG002	Generation Plant Miramar	-	-	-
Daniel S. Baerman	1EG003	Generation Plant Palomar	-	-	-
Daniel S. Baerman	1EG004	Electric Project Development	5	10	11
Daniel S. Baerman	1EG005	Generation Plant Otay Mesa	-	-	-
Daniel S. Baerman	1EG006	Generation Plant Desert Star	-	-	-
Daniel S. Baerman	1EG007	Generation Plant Cuyamaca Peak	-	-	-
Daniel S. Baerman	1EG010	EG -SONGS Wkp_Grp_2	-	-	-
		Total	<u>5</u>	<u>10</u>	<u>11</u>
		Total NSS	<u>5</u>	<u>10</u>	<u>11</u>
Daniel S. Baerman	2100-3433	RESOURCE PLANNING DIRECTOR	184	270	289
		Total	<u>184</u>	<u>270</u>	<u>289</u>
		Total SS	<u>184</u>	<u>270</u>	<u>289</u>
		Total Generation Gas	<u>\$ 189</u>	<u>\$ 280</u>	<u>\$ 300</u>

Table KN-18
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
ENGINEERING COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Maria T. Martinez	1TD000	TIMP	7,744	11,000	11,758
		Total	7,744	11,000	11,758
		Total NSS	7,744	11,000	11,758
		Total SS	-	-	-
		Total Engineering Combined	7,744	11,000	11,758

Table KN-19
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
ENGINEERING ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Maria T. Martinez	1TD000	TIMP	-	-	-
		Total	-	-	-
		Total NSS	-	-	-
		Total SS	-	-	-
		Total Engineering Electric Distribution	\$ -	\$ -	\$ -
		Total Engineering Generation	-	-	-
		Total Engineering Electric Department	-	-	-

Table KN-20
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
ENGINEERING GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Maria T. Martinez	1TD000	TIMP	7,744	11,000	11,758
		Total	7,744	11,000	11,758
		Total NSS	7,744	11,000	11,758
		Total SS	-	-	-
		Total Engineering Gas	\$ 7,744	\$ 11,000	\$ 11,758

Table KN-21
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
PROCUREMENT COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Kendall K. Helm	1EP001	Long Term Procurement	1,763	2,203	2,389
Kendall K. Helm	1EP002	Trading & Scheduling	2,831	2,949	3,192
Kendall K. Helm	1EP003	Mid and Back Office	3,369	3,489	3,769
		SDG&E Electric & Gas Procurement Total	<u>7,963</u>	<u>8,641</u>	<u>9,349</u>
		Total NSS	<u>7,963</u>	<u>8,641</u>	<u>9,349</u>
		SDG&E Electric & Gas Procurement Total	<u>-</u>	<u>-</u>	<u>-</u>
		Total SS	<u>-</u>	<u>-</u>	<u>-</u>
		Total Procurement Combined	<u>\$ 7,963</u>	<u>\$ 8,641</u>	<u>\$ 9,349</u>

Table KN-22
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
PROCUREMENT ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Kendall K. Helm	1EP001	Long Term Procurement	1,763	2,203	2,389
Kendall K. Helm	1EP002	Trading & Scheduling	2,831	2,949	3,192
Kendall K. Helm	1EP003	Mid and Back Office	3,369	3,489	3,769
		Total	<u>7,963</u>	<u>8,641</u>	<u>9,349</u>
		Total NSS	<u>7,963</u>	<u>8,641</u>	<u>9,349</u>
		Total	<u>-</u>	<u>-</u>	<u>-</u>
		Total SS	<u>-</u>	<u>-</u>	<u>-</u>
		Total Procurement Electric Department	<u>\$ 7,963</u>	<u>\$ 8,641</u>	<u>\$ 9,349</u>

Table KN-23
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
PROCUREMENT ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Kendall K. Helm	1EP001	Long Term Procurement	1,763	2,203	2,389
Kendall K. Helm	1EP002	Trading & Scheduling	2,831	2,949	3,192
Kendall K. Helm	1EP003	Mid and Back Office	3,369	3,489	3,769
		Total	<u>7,963</u>	<u>8,641</u>	<u>9,349</u>
		Total NSS	<u>7,963</u>	<u>8,641</u>	<u>9,349</u>
		Total	<u>-</u>	<u>-</u>	<u>-</u>
		Total SS	<u>-</u>	<u>-</u>	<u>-</u>
		Total Procurement Electric Distribution	<u>\$ 7,963</u>	<u>\$ 8,641</u>	<u>\$ 9,349</u>

Table KN-24
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
PROCUREMENT GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Kendall K. Helm	1EP001	Long Term Procurement	-	-	-
Kendall K. Helm	1EP002	Trading & Scheduling	-	-	-
Kendall K. Helm	1EP003	Mid and Back Office	-	-	-
		Total	-	-	-
		Total NSS	-	-	-
		Total	-	-	-
		Total SS	-	-	-
		Total Procurement Generation	\$ -	\$ -	\$ -

Table KN-25
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
PROCUREMENT GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Kendall K. Helm	1EP001	Long Term Procurement	-	-	-
Kendall K. Helm	1EP002	Trading & Scheduling	-	-	-
Kendall K. Helm	1EP003	Mid and Back Office	-	-	-
		Total	-	-	-
		Total NSS	-	-	-
		Total	-	-	-
		Total SS	-	-	-
		Total Procurement Gas	\$ -	\$ -	\$ -

Table KN-26
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
CUSTOMER SERVICES COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Gwen R. Marelli	1FC001	Customer Services Field - Operations	13,212	15,878	17,236
Gwen R. Marelli	1FC002	Customer Services Field - Supervision	1,237	1,422	1,544
Gwen R. Marelli	1FC003	Customer Services Field - Dispatch	4,335	3,906	4,243
Gwen R. Marelli	1FC004	Customer Services Field - Support	2,655	2,517	2,728
		Total	<u>21,439</u>	<u>23,723</u>	<u>25,751</u>
Lisa C. Davidson	1IN001	Residential Customer Services	5,262	6,267	6,742
Lisa C. Davidson	1IN002	Business Services	5,037	4,812	5,210
Lisa C. Davidson	1IN003	Marketing Research & Analytics	6,219	8,574	9,198
Lisa C. Davidson	1IN004	Customer Programs Pricing and Other Office	5,226	6,405	6,924
		Total	<u>21,744</u>	<u>26,058</u>	<u>28,075</u>
Jerry D. Stewart	1OO001	Advanced Metering Ops	8,157	10,034	10,868
Jerry D. Stewart	1OO002	Billing	4,263	8,023	8,627
Jerry D. Stewart	1OO003	Credit & Collections	2,627	3,073	3,322
Jerry D. Stewart	1OO004	Remittance Processing	4,945	4,642	4,690
Jerry D. Stewart	1OO005	Branch Offices	1,979	2,209	2,381
Jerry D. Stewart	1OO006	CCC Operations	8,937	10,096	10,967
Jerry D. Stewart	1OO007	CCC Support	2,790	2,679	2,883
Jerry D. Stewart	1OO008	Customer Operations Support & Projects	3,119	3,603	3,912
		Total	<u>36,817</u>	<u>44,359</u>	<u>47,649</u>
		Total NSS	<u>80,000</u>	<u>94,140</u>	<u>101,475</u>
Lisa C. Davidson	2100-3434	Business Strategy and Development	239	239	256
Lisa C. Davidson	2100-3709	Low Emission Vehicle Program	104	104	111
		Total	<u>343</u>	<u>344</u>	<u>367</u>
Gwen R. Marelli	2100-3511	Customer Services Continuous Improvement Manager	-	-	-
		Total	<u>-</u>	<u>-</u>	<u>-</u>
		Total SS	<u>343</u>	<u>344</u>	<u>367</u>
		Total Customer Services Electric Distribution	<u>\$ 80,343</u>	<u>\$ 94,484</u>	<u>\$ 101,842</u>

Table KN-27
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
CUSTOMER SERVICES ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Gwen R. Marelli	1FC001	Customer Services Field - Operations	1,653	1,986	2,156
Gwen R. Marelli	1FC002	Customer Services Field - Supervision	247	284	308
Gwen R. Marelli	1FC003	Customer Services Field - Dispatch	2,279	2,054	2,231
Gwen R. Marelli	1FC004	Customer Services Field - Support	650	616	667
		Total	<u>4,829</u>	<u>4,940</u>	<u>5,363</u>
Lisa C. Davidson	1IN001	Residential Customer Services	4,599	5,477	5,893
Lisa C. Davidson	1IN002	Business Services	4,318	4,125	4,467
Lisa C. Davidson	1IN003	Marketing Research & Analytics	5,435	7,494	8,039
Lisa C. Davidson	1IN004	Customer Programs Pricing and Other Office	4,126	5,056	5,466
		Total	<u>18,478</u>	<u>22,153</u>	<u>23,865</u>
Jerry D. Stewart	1OO001	Advanced Metering Ops	7,779	9,569	10,364
Jerry D. Stewart	1OO002	Billing	2,767	5,207	5,599
Jerry D. Stewart	1OO003	Credit & Collections	1,705	1,994	2,156
Jerry D. Stewart	1OO004	Remittance Processing	3,209	3,013	3,044
Jerry D. Stewart	1OO005	Branch Offices	1,284	1,434	1,545
Jerry D. Stewart	1OO006	CCC Operations	5,800	6,552	7,118
Jerry D. Stewart	1OO007	CCC Support	1,811	1,739	1,871
Jerry D. Stewart	1OO008	Customer Operations Support & Projects	2,230	2,576	2,797
		Total	<u>26,585</u>	<u>32,084</u>	<u>34,493</u>
		Total NSS	<u>49,892</u>	<u>59,176</u>	<u>63,721</u>
Lisa C. Davidson	2100-3434	Business Strategy and Development	180	180	193
Lisa C. Davidson	2100-3709	Low Emission Vehicle Program	91	91	97
		Total	<u>271</u>	<u>271</u>	<u>290</u>
Gwen R. Marelli	2100-3511	Customer Services Continuous Improvement Manager	-	-	-
		Total	<u>-</u>	<u>-</u>	<u>-</u>
		Total SS	<u>271</u>	<u>271</u>	<u>290</u>
		Total Customer Services Electric Distribution	<u>\$ 50,163</u>	<u>\$ 59,447</u>	<u>\$ 64,011</u>

Table KN-28
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
CUSTOMER SERVICES ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Gwen R. Marelli	1FC001	Customer Services Field - Operations	1,653	1,986	2,156
Gwen R. Marelli	1FC002	Customer Services Field - Supervision	247	284	308
Gwen R. Marelli	1FC003	Customer Services Field - Dispatch	2,279	2,054	2,231
Gwen R. Marelli	1FC004	Customer Services Field - Support	650	616	667
		Total	<u>4,829</u>	<u>4,940</u>	<u>5,363</u>
Lisa C. Davidson	1IN001	Residential Customer Services	4,599	5,477	5,893
Lisa C. Davidson	1IN002	Business Services	4,318	4,125	4,467
Lisa C. Davidson	1IN003	Marketing Research & Analytics	5,435	7,494	8,039
Lisa C. Davidson	1IN004	Customer Programs Pricing and Other Office	3,961	4,855	5,248
		Total	<u>18,314</u>	<u>21,951</u>	<u>23,647</u>
Jerry D. Stewart	1OO001	Advanced Metering Ops	7,779	9,569	10,364
Jerry D. Stewart	1OO002	Billing	2,767	5,207	5,599
Jerry D. Stewart	1OO003	Credit & Collections	1,705	1,994	2,156
Jerry D. Stewart	1OO004	Remittance Processing	3,209	3,013	3,044
Jerry D. Stewart	1OO005	Branch Offices	1,284	1,434	1,545
Jerry D. Stewart	1OO006	CCC Operations	5,800	6,552	7,118
Jerry D. Stewart	1OO007	CCC Support	1,811	1,739	1,871
Jerry D. Stewart	1OO008	Customer Operations Support & Projects	2,230	2,576	2,797
		Total	<u>26,585</u>	<u>32,084</u>	<u>34,493</u>
		Total NSS	<u>49,727</u>	<u>58,974</u>	<u>63,503</u>
Lisa C. Davidson	2100-3434	Business Strategy and Development	169	169	181
Lisa C. Davidson	2100-3709	Low Emission Vehicle Program	91	91	97
		Total	<u>260</u>	<u>260</u>	<u>278</u>
Gwen R. Marelli	2100-3511	Customer Services Continuous Improvement Manager	-	-	-
		Total	<u>-</u>	<u>-</u>	<u>-</u>
		Total SS	<u>260</u>	<u>260</u>	<u>278</u>
		Total Customer Services Electric Distribution	<u>\$ 49,988</u>	<u>\$ 59,235</u>	<u>\$ 63,782</u>

Table KN-29
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
CUSTOMER SERVICES GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Gwen R. Marelli	1FC001	Customer Services Field - Operations	-	-	-
Gwen R. Marelli	1FC002	Customer Services Field - Supervision	-	-	-
Gwen R. Marelli	1FC003	Customer Services Field - Dispatch	-	-	-
Gwen R. Marelli	1FC004	Customer Services Field - Support	-	-	-
Total			-	-	-
Lisa C. Davidson	1IN001	Residential Customer Services	-	-	-
Lisa C. Davidson	1IN002	Business Services	-	-	-
Lisa C. Davidson	1IN003	Marketing Research & Analytics	-	-	-
Lisa C. Davidson	1IN004	Customer Programs Pricing and Other Office	164	201	218
Total			164	201	218
Jerry D. Stewart	1OO001	Advanced Metering Ops	-	-	-
Jerry D. Stewart	1OO002	Billing	-	-	-
Jerry D. Stewart	1OO003	Credit & Collections	-	-	-
Jerry D. Stewart	1OO004	Remittance Processing	-	-	-
Jerry D. Stewart	1OO005	Branch Offices	-	-	-
Jerry D. Stewart	1OO006	CCC Operations	-	-	-
Jerry D. Stewart	1OO007	CCC Support	-	-	-
Jerry D. Stewart	1OO008	Customer Operations Support & Projects	-	-	-
Total			-	-	-
Total NSS			164	201	218
Lisa C. Davidson	2100-3434	Business Strategy and Development	11	11	12
Lisa C. Davidson	2100-3709	Low Emission Vehicle Program	-	-	-
Total			11	11	12
Gwen R. Marelli	2100-3511	Customer Services Continuous Improvement Manager	-	-	-
Total			-	-	-
Total SS			11	11	12
Total Customer Services Generation			\$ 175	\$ 212	\$ 229

Table KN-30
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
CUSTOMER SERVICES GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Gwen R. Marelli	1FC001	Customer Services Field - Operations	11,559	13,892	15,080
Gwen R. Marelli	1FC002	Customer Services Field - Supervision	990	1,138	1,236
Gwen R. Marelli	1FC003	Customer Services Field - Dispatch	2,056	1,852	2,012
Gwen R. Marelli	1FC004	Customer Services Field - Support	2,005	1,901	2,060
		Total	<u>16,610</u>	<u>18,783</u>	<u>20,389</u>
Lisa C. Davidson	1IN001	Residential Customer Services	663	790	850
Lisa C. Davidson	1IN002	Business Services	719	687	743
Lisa C. Davidson	1IN003	Marketing Research & Analytics	784	1,080	1,159
Lisa C. Davidson	1IN004	Customer Programs Pricing and Other Office	1,100	1,349	1,458
		Total	<u>3,266</u>	<u>3,905</u>	<u>4,210</u>
Jerry D. Stewart	1OO001	Advanced Metering Ops	378	465	504
Jerry D. Stewart	1OO002	Billing	1,496	2,816	3,028
Jerry D. Stewart	1OO003	Credit & Collections	922	1,079	1,166
Jerry D. Stewart	1OO004	Remittance Processing	1,736	1,629	1,646
Jerry D. Stewart	1OO005	Branch Offices	695	775	836
Jerry D. Stewart	1OO006	CCC Operations	3,137	3,544	3,849
Jerry D. Stewart	1OO007	CCC Support	979	940	1,012
Jerry D. Stewart	1OO008	Customer Operations Support & Projects	889	1,027	1,115
		Total	<u>10,232</u>	<u>12,275</u>	<u>13,156</u>
		Total NSS	<u>30,108</u>	<u>34,964</u>	<u>37,754</u>
Lisa C. Davidson	2100-3434	Business Strategy and Development	59	59	63
Lisa C. Davidson	2100-3709	Low Emission Vehicle Program	13	13	14
		Total	<u>72</u>	<u>72</u>	<u>77</u>
Gwen R. Marelli	2100-3511	Customer Services Continuous Improvement Manager	-	-	-
		Total	<u>-</u>	<u>-</u>	<u>-</u>
		Total SS	<u>72</u>	<u>72</u>	<u>77</u>
		Total Customer Services Gas	<u>\$ 30,180</u>	<u>\$ 35,036</u>	<u>\$ 37,831</u>

Table KN-31
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Christopher R. Olmsted	1IT001	IT Applications NSS	14,114	17,489	18,748
Christopher R. Olmsted	1IT002	IT Infrastructue NSS	3,650	15,198	16,075
Christopher R. Olmsted	1IT003	IT Support NSS	(2)	(2,946)	(3,141)
		Total NSS	17,762	29,741	31,682
Christopher R. Olmsted	2100-0207	TELECOM FIELD VOICE - SDGE	2,044	2,045	2,185
Christopher R. Olmsted	2100-3071	SAP ACCOUNTING & FINANCIAL SYSTEMS	1,619	1,620	1,731
Christopher R. Olmsted	2100-3072	SUPPLY CHAIN & LOGISTICS SYSTEMS	1,573	1,573	1,680
Christopher R. Olmsted	2100-3073	ENTERPRISE INTEGRATION SERVICES	1,654	1,653	1,766
Christopher R. Olmsted	2100-3074	SSDS PROJECT OFFICE	653	654	698
Christopher R. Olmsted	2100-3088	SOFTWARE DEV - WORK MEAS SYSTEMS	326	325	347
Christopher R. Olmsted	2100-3089	BUSINESS INTELLIGENCE GROUP	894	894	956
Christopher R. Olmsted	2100-3091	SOFTWARE DEV - DATABASE ADMINISTRATOR	2,069	2,069	2,211
Christopher R. Olmsted	2100-3095	NETORK COMMUNICATION SERVICES DIRECTOR	34	34	36
Christopher R. Olmsted	2100-3097	CLIENT TECHNOLOGY & DEPOT SERVICES	1,655	1,655	1,768
Christopher R. Olmsted	2100-3099	DESKTOP HARDWARE	1	(1)	(1)
Christopher R. Olmsted	2100-3100	MIDDLEWARE AND INTERNET ENGINEERING	570	569	608
Christopher R. Olmsted	2100-3102	INFRASTRUCTURE ENG & OPS DIRECTOR	309	543	580
Christopher R. Olmsted	2100-3106	NETWORK/TELECOM SERVICES - SDG&E	5,703	5,947	6,354
Christopher R. Olmsted	2100-3107	ENTERPRISE OPERATIONS	2	2	2
Christopher R. Olmsted	2100-3161	CHIEF ADMIN OFFICER	596	595	636
Christopher R. Olmsted	2100-3317	IT ACCOUNT MANAGEMENT	672	671	717
Christopher R. Olmsted	2100-3334	SERVER MANAGEMENT	888	888	949
Christopher R. Olmsted	2100-3498	INFRASTRUCTURE PROGRAM OFFICE	369	368	393
Christopher R. Olmsted	2100-3500	IT NETWORK FIELD - LAN/WAN VOICE	(4)	1	1
Christopher R. Olmsted	2100-3502	ENTERPRISE COMMAND CENTER	2,087	2,087	2,230
Christopher R. Olmsted	2100-3623	SHARED SOFTWARE DEVELOPMENT CONTRACTS	5,278	6,252	6,679
Christopher R. Olmsted	2100-3683	PROJECT IMPROVEMENT OFFICE-NCS	217	216	231

Table KN-31
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
Christopher R. Olmsted	2100-3684	SERVICE DELIVERY - NCS	768	767	820
Christopher R. Olmsted	2100-3698	SERVICE DEVELOPMENT PROGRAM MANAGEMENT	293	293	313
Christopher R. Olmsted	2100-3699	CUSTOMER ANALYTICS SYSTEM	486	486	520
Christopher R. Olmsted	2100-3713	FIELD FORCE PROGRAM DELIVERY TEAM	55	55	59
Christopher R. Olmsted	2100-3733	SVP & CITO	1,241	844	902
Christopher R. Olmsted	2100-3807	ENTERPRISE FINANCIAL & OPS SOLUTION	150	151	161
Christopher R. Olmsted	2100-3814	DIRECTOR IT INFRASTRUCTURE	864	1,098	1,173
Christopher R. Olmsted	2100-3824	INFRASTR PRGRM OFFICE	898	758	809
Christopher R. Olmsted	2100-3842	IT ASSOCIATE PROGRAM	1,353	1,417	1,514
Christopher R. Olmsted	2100-3848	CUSTOMER ANALYTICS SYSTEM	670	670	716
Christopher R. Olmsted	2100-3855	CLINT SERVICES MAINTENANCE & SUPPORT	2	2	2
Christopher R. Olmsted	2100-3856	VOICE LEASED CIRCUITS	2,328	974	1,041
Christopher R. Olmsted	2100-3884	MGD SVC VOICE ENTERP	832	2,397	2,561
Christopher R. Olmsted	2100-3885	VOICE ENTERP SUPPORT	503	502	537
Christopher R. Olmsted	2100-3888	IT PORTFOLIO MANAGEMENT	68	67	72
Christopher R. Olmsted	2100-3900	IT PORTFOLIO MANAGEMENT	288	288	308
Christopher R. Olmsted	2100-3916	BI & ANALYTICS ENGINEERING-SAS CONTRACTS	4,045	4,818	5,147
Christopher R. Olmsted	2100-3921	IT&OTI CONTRACTS SS	9,812	10,438	11,152
Christopher R. Olmsted	2100-3924	BI & ANALYTICS OPS-SAP CONTRACTS	1,233	1,468	1,568
Christopher R. Olmsted	2100-3926	IT Communications	162	193	206
Christopher R. Olmsted	2100-3954	IT TELECOM PMO	89	88	94
Christopher R. Olmsted	2100-3975	SDGE NETWORK ENGINEERING	275	274	293
Christopher R. Olmsted	2100-3979	SCG IT INFRA SERVICES - DIRECTOR	-	0	0
		Total	55,624	58,709	62,724
Gavin H. Worden	2100-3101	SECURITY POLICY AND AWARENESS	957	957	1,022
Gavin H. Worden	2100-3763	DIRECTOR - INFORMATION SECURITY	367	367	392
Gavin H. Worden	2100-3774	SECURITY ENGINEERING	993	1,434	1,532
Gavin H. Worden	2100-3775	SECURITY OPERATIONS	1,642	1,757	1,877
Gavin H. Worden	2100-3781	CRITICAL INFRASTRUCTURE PROTECTION	2,587	3,370	3,370
Gavin H. Worden	2100-3976	INFORMATION SECURITY PROGRAMS	22	22	24
		Total	6,568	7,907	8,217
		Total SS	62,192	66,616	70,942
		Total IT	\$ 79,954	\$ 96,357	\$ 102,624

Table KN-32
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
Christopher R. Olmsted	1IT001	IT Applications NSS	9,799	12,143	13,017
Christopher R. Olmsted	1IT002	IT Infrastructue NSS	2,748	11,444	12,105
Christopher R. Olmsted	1IT003	IT Support NSS	(2)	(2,218)	(2,365)
		Total	12,546	21,368	22,756
Christopher R. Olmsted	2100-0207	TELECOM FIELD VOICE - SDGE	1,539	1,540	1,645
Christopher R. Olmsted	2100-3071	SAP ACCOUNTING & FINANCIAL SYSTEMS	1,219	1,220	1,303
Christopher R. Olmsted	2100-3072	SUPPLY CHAIN & LOGISTICS SYSTEMS	1,184	1,184	1,265
Christopher R. Olmsted	2100-3073	ENTERPRISE INTEGRATION SERVICES	1,245	1,245	1,330
Christopher R. Olmsted	2100-3074	SSDS PROJECT OFFICE	492	492	526
Christopher R. Olmsted	2100-3088	SOFTWARE DEV - WORK MEAS SYSTEMS	245	245	262
Christopher R. Olmsted	2100-3089	BUSINESS INTELLIGENCE GROUP	673	673	720
Christopher R. Olmsted	2100-3091	SOFTWARE DEV - DATABASE ADMINISTRATOR	1,558	1,558	1,665
Christopher R. Olmsted	2100-3095	NETORK COMMUNICATION SERVICES DIRECTOR	26	25	27
Christopher R. Olmsted	2100-3097	CLIENT TECHNOLOGY & DEPOT SERVICES	1,246	1,246	1,332
Christopher R. Olmsted	2100-3099	DESKTOP HARDWARE	1	(1)	(1)
Christopher R. Olmsted	2100-3100	MIDDLEWARE AND INTERNET ENGINEERING	429	429	458
Christopher R. Olmsted	2100-3102	INFRASTRUCTURE ENG & OPS DIRECTOR	233	409	437
Christopher R. Olmsted	2100-3106	NETWORK/TELECOM SERVICES - SDG&E	4,244	4,426	4,729
Christopher R. Olmsted	2100-3107	ENTERPRISE OPERATIONS	2	1	2
Christopher R. Olmsted	2100-3161	CHIEF ADMIN OFFICER	449	448	479
Christopher R. Olmsted	2100-3317	IT ACCOUNT MANAGEMENT	506	505	540
Christopher R. Olmsted	2100-3334	SERVER MANAGEMENT	669	669	714
Christopher R. Olmsted	2100-3498	INFRASTRUCTURE PROGRAM OFFICE	278	277	296
Christopher R. Olmsted	2100-3500	IT NETWORK FIELD - LAN/WAN VOICE	(3)	0	0
Christopher R. Olmsted	2100-3502	ENTERPRISE COMMAND CENTER	1,572	1,572	1,679
Christopher R. Olmsted	2100-3623	SHARED SOFTWARE DEVELOPMENT CONTRACTS	3,974	4,708	5,030
Christopher R. Olmsted	2100-3683	PROJECT IMPROVEMENT OFFICE-NCS	163	163	174

Table KN-32
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Christopher R. Olmsted	2100-3684	SERVICE DELIVERY - NCS	578	578	617
Christopher R. Olmsted	2100-3698	SERVICE DEVELOPMENT PROGRAM MANAGEMENT	221	221	236
Christopher R. Olmsted	2100-3699	CUSTOMER ANALYTICS SYSTEM	366	366	391
Christopher R. Olmsted	2100-3713	FIELD FORCE PROGRAM DELIVERY TEAM	41	41	44
Christopher R. Olmsted	2100-3733	SVP & CITO	934	636	679
Christopher R. Olmsted	2100-3807	ENTERPRISE FINANCIAL & OPS SOLUTION	113	113	121
Christopher R. Olmsted	2100-3814	DIRECTOR IT INFRASTRUCTURE	651	827	884
Christopher R. Olmsted	2100-3824	INFRASTR PRGRM OFFICE	676	570	609
Christopher R. Olmsted	2100-3842	IT ASSOCIATE PROGRAM	1,019	1,067	1,140
Christopher R. Olmsted	2100-3848	CUSTOMER ANALYTICS SYSTEM	505	505	539
Christopher R. Olmsted	2100-3855	CLINT SERVICES MAINTENANCE & SUPPORT	2	2	2
Christopher R. Olmsted	2100-3856	VOICE LEASED CIRCUITS	1,753	734	784
Christopher R. Olmsted	2100-3884	MGD SVC VOICE ENTERP	626	1,805	1,928
Christopher R. Olmsted	2100-3885	VOICE ENTERP SUPPORT	379	378	404
Christopher R. Olmsted	2100-3888	IT PORTFOLIO MANAGEMENT	51	51	54
Christopher R. Olmsted	2100-3900	IT PORTFOLIO MANAGEMENT	217	217	232
Christopher R. Olmsted	2100-3916	BI & ANALYTICS ENGINEERING-SAS CONTRACTS	3,046	3,628	3,876
Christopher R. Olmsted	2100-3921	IT&OTI CONTRACTS SS	7,388	7,860	8,397
Christopher R. Olmsted	2100-3924	BI & ANALYTICS OPS-SAP CONTRACTS	928	1,105	1,181
Christopher R. Olmsted	2100-3926	IT Communications	122	145	155
Christopher R. Olmsted	2100-3954	IT TELECOM PMO	67	66	71
Christopher R. Olmsted	2100-3975	SDGE NETWORK ENGINEERING	207	207	221
Christopher R. Olmsted	2100-3979	SCG IT INFRA SERVICES - DIRECTOR	-	0	0
		Total	41,835	44,156	47,176
Gavin H. Worden	2100-3101	SECURITY POLICY AND AWARENESS	721	721	770
Gavin H. Worden	2100-3763	DIRECTOR - INFORMATION SECURITY	276	276	295
Gavin H. Worden	2100-3774	SECURITY ENGINEERING	748	1,080	1,154
Gavin H. Worden	2100-3775	SECURITY OPERATIONS	1,236	1,323	1,413
Gavin H. Worden	2100-3781	CRITICAL INFRASTRUCTURE PROTECTION	1,948	2,538	2,538
Gavin H. Worden	2100-3976	INFORMATION SECURITY PROGRAMS	17	17	18
		Total	4,946	5,954	6,188
		Total SS	46,781	50,109	53,363
		Total IT Electric Department	\$ 59,327	\$ 71,478	\$ 76,120

Table KN-33
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
Christopher R. Olmsted	1IT001	IT Applications NSS	9,523	11,800	12,649
Christopher R. Olmsted	1IT002	IT Infrastructue NSS	2,584	10,760	11,381
Christopher R. Olmsted	1IT003	IT Support NSS	(1)	(2,086)	(2,224)
		Total	12,106	20,474	21,807
Christopher R. Olmsted	2100-0207	TELECOM FIELD VOICE - SDGE	1,447	1,448	1,547
Christopher R. Olmsted	2100-3071	SAP ACCOUNTING & FINANCIAL SYSTEMS	1,146	1,147	1,225
Christopher R. Olmsted	2100-3072	SUPPLY CHAIN & LOGISTICS SYSTEMS	1,114	1,113	1,190
Christopher R. Olmsted	2100-3073	ENTERPRISE INTEGRATION SERVICES	1,171	1,171	1,251
Christopher R. Olmsted	2100-3074	SSDS PROJECT OFFICE	462	463	494
Christopher R. Olmsted	2100-3088	SOFTWARE DEV - WORK MEAS SYSTEMS	231	230	246
Christopher R. Olmsted	2100-3089	BUSINESS INTELLIGENCE GROUP	633	633	677
Christopher R. Olmsted	2100-3091	SOFTWARE DEV - DATABASE ADMINISTRATOR	1,465	1,465	1,565
Christopher R. Olmsted	2100-3095	NETORK COMMUNICATION SERVICES DIRECTOR	24	24	25
Christopher R. Olmsted	2100-3097	CLIENT TECHNOLOGY & DEPOT SERVICES	1,172	1,172	1,252
Christopher R. Olmsted	2100-3099	DESKTOP HARDWARE	1	(0)	(1)
Christopher R. Olmsted	2100-3100	MIDDLEWARE AND INTERNET ENGINEERING	404	403	431
Christopher R. Olmsted	2100-3102	INFRASTRUCTURE ENG & OPS DIRECTOR	219	384	411
Christopher R. Olmsted	2100-3106	NETWORK/TELECOM SERVICES - SDG&E	4,009	4,181	4,467
Christopher R. Olmsted	2100-3107	ENTERPRISE OPERATIONS	1	1	1
Christopher R. Olmsted	2100-3161	CHIEF ADMIN OFFICER	422	421	450
Christopher R. Olmsted	2100-3317	IT ACCOUNT MANAGEMENT	476	475	507
Christopher R. Olmsted	2100-3334	SERVER MANAGEMENT	629	629	672
Christopher R. Olmsted	2100-3498	INFRASTRUCTURE PROGRAM OFFICE	261	261	278
Christopher R. Olmsted	2100-3500	IT NETWORK FIELD - LAN/WAN VOICE	(3)	0	0
Christopher R. Olmsted	2100-3502	ENTERPRISE COMMAND CENTER	1,478	1,478	1,579
Christopher R. Olmsted	2100-3623	SHARED SOFTWARE DEVELOPMENT CONTRACTS	3,737	4,426	4,729
Christopher R. Olmsted	2100-3683	PROJECT IMPROVEMENT OFFICE-NCS	154	153	164

Table KN-33
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Christopher R. Olmsted	2100-3684	SERVICE DELIVERY - NCS	544	543	580
Christopher R. Olmsted	2100-3698	SERVICE DEVELOPMENT PROGRAM MANAGEMENT	207	208	222
Christopher R. Olmsted	2100-3699	CUSTOMER ANALYTICS SYSTEM	344	344	368
Christopher R. Olmsted	2100-3713	FIELD FORCE PROGRAM DELIVERY TEAM	39	39	42
Christopher R. Olmsted	2100-3733	SVP & CITO	879	598	639
Christopher R. Olmsted	2100-3807	ENTERPRISE FINANCIAL & OPS SOLUTION	106	107	114
Christopher R. Olmsted	2100-3814	DIRECTOR IT INFRASTRUCTURE	612	778	831
Christopher R. Olmsted	2100-3824	INFRASTR PRGRM OFFICE	636	536	573
Christopher R. Olmsted	2100-3842	IT ASSOCIATE PROGRAM	958	1,003	1,072
Christopher R. Olmsted	2100-3848	CUSTOMER ANALYTICS SYSTEM	474	474	507
Christopher R. Olmsted	2100-3855	CLINT SERVICES MAINTENANCE & SUPPORT	1	2	2
Christopher R. Olmsted	2100-3856	VOICE LEASED CIRCUITS	1,648	690	737
Christopher R. Olmsted	2100-3884	MGD SVC VOICE ENTERP	589	1,697	1,813
Christopher R. Olmsted	2100-3885	VOICE ENTERP SUPPORT	356	356	380
Christopher R. Olmsted	2100-3888	IT PORTFOLIO MANAGEMENT	48	48	51
Christopher R. Olmsted	2100-3900	IT PORTFOLIO MANAGEMENT	204	204	218
Christopher R. Olmsted	2100-3916	BI & ANALYTICS ENGINEERING-SAS CONTRACTS	2,864	3,411	3,644
Christopher R. Olmsted	2100-3921	IT&OTI CONTRACTS SS	6,947	7,390	7,895
Christopher R. Olmsted	2100-3924	BI & ANALYTICS OPS-SAP CONTRACTS	873	1,039	1,110
Christopher R. Olmsted	2100-3926	IT Communications	115	137	146
Christopher R. Olmsted	2100-3954	IT TELECOM PMO	63	62	67
Christopher R. Olmsted	2100-3975	SDGE NETWORK ENGINEERING	195	194	207
Christopher R. Olmsted	2100-3979	SCG IT INFRA SERVICES - DIRECTOR	-	0	0
		Total	39,353	41,536	44,377
Gavin H. Worden	2100-3101	SECURITY POLICY AND AWARENESS	678	677	724
Gavin H. Worden	2100-3763	DIRECTOR - INFORMATION SECURITY	260	260	278
Gavin H. Worden	2100-3774	SECURITY ENGINEERING	703	1,015	1,085
Gavin H. Worden	2100-3775	SECURITY OPERATIONS	1,163	1,244	1,329
Gavin H. Worden	2100-3781	CRITICAL INFRASTRUCTURE PROTECTION	1,832	2,386	2,386
Gavin H. Worden	2100-3976	INFORMATION SECURITY PROGRAMS	16	16	17
		Total	4,650	5,598	5,818
		Total SS	44,004	47,134	50,195
		Total IT Electric Distribution	\$ 56,109	\$ 67,609	\$ 72,002

Table KN-34
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
Christopher R. Olmsted	1IT001	IT Applications NSS	277	343	367
Christopher R. Olmsted	1IT002	IT Infrastructue NSS	164	684	723
Christopher R. Olmsted	1IT003	IT Support NSS	(0)	(133)	(141)
		Total	441	894	950
Christopher R. Olmsted	2100-0207	TELECOM FIELD VOICE - SDGE	92	92	98
Christopher R. Olmsted	2100-3071	SAP ACCOUNTING & FINANCIAL SYSTEMS	73	73	78
Christopher R. Olmsted	2100-3072	SUPPLY CHAIN & LOGISTICS SYSTEMS	71	71	76
Christopher R. Olmsted	2100-3073	ENTERPRISE INTEGRATION SERVICES	74	74	79
Christopher R. Olmsted	2100-3074	SSDS PROJECT OFFICE	29	29	31
Christopher R. Olmsted	2100-3088	SOFTWARE DEV - WORK MEAS SYSTEMS	15	15	16
Christopher R. Olmsted	2100-3089	BUSINESS INTELLIGENCE GROUP	40	40	43
Christopher R. Olmsted	2100-3091	SOFTWARE DEV - DATABASE ADMINISTRATOR	93	93	99
Christopher R. Olmsted	2100-3095	NETORK COMMUNICATION SERVICES DIRECTOR	2	2	2
Christopher R. Olmsted	2100-3097	CLIENT TECHNOLOGY & DEPOT SERVICES	74	74	80
Christopher R. Olmsted	2100-3099	DESKTOP HARDWARE	0	(0)	(0)
Christopher R. Olmsted	2100-3100	MIDDLEWARE AND INTERNET ENGINEERING	26	26	27
Christopher R. Olmsted	2100-3102	INFRASTRUCTURE ENG & OPS DIRECTOR	14	24	26
Christopher R. Olmsted	2100-3106	NETWORK/TELECOM SERVICES - SDG&E	235	245	262
Christopher R. Olmsted	2100-3107	ENTERPRISE OPERATIONS	0	0	0
Christopher R. Olmsted	2100-3161	CHIEF ADMIN OFFICER	27	27	29
Christopher R. Olmsted	2100-3317	IT ACCOUNT MANAGEMENT	30	30	32
Christopher R. Olmsted	2100-3334	SERVER MANAGEMENT	40	40	43
Christopher R. Olmsted	2100-3498	INFRASTRUCTURE PROGRAM OFFICE	17	17	18
Christopher R. Olmsted	2100-3500	IT NETWORK FIELD - LAN/WAN VOICE	(0)	0	0
Christopher R. Olmsted	2100-3502	ENTERPRISE COMMAND CENTER	94	94	100
Christopher R. Olmsted	2100-3623	SHARED SOFTWARE DEVELOPMENT CONTRACTS	238	281	301
Christopher R. Olmsted	2100-3683	PROJECT IMPROVEMENT OFFICE-NCS	10	10	10

Table KN-34
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Christopher R. Olmsted	2100-3684	SERVICE DELIVERY - NCS	35	35	37
Christopher R. Olmsted	2100-3698	SERVICE DEVELOPMENT PROGRAM MANAGEMENT	13	13	14
Christopher R. Olmsted	2100-3699	CUSTOMER ANALYTICS SYSTEM	22	22	23
Christopher R. Olmsted	2100-3713	FIELD FORCE PROGRAM DELIVERY TEAM	2	2	3
Christopher R. Olmsted	2100-3733	SVP & CITO	56	38	41
Christopher R. Olmsted	2100-3807	ENTERPRISE FINANCIAL & OPS SOLUTION	7	7	7
Christopher R. Olmsted	2100-3814	DIRECTOR IT INFRASTRUCTURE	39	49	53
Christopher R. Olmsted	2100-3824	INFRASTR PRGRM OFFICE	40	34	36
Christopher R. Olmsted	2100-3842	IT ASSOCIATE PROGRAM	61	64	68
Christopher R. Olmsted	2100-3848	CUSTOMER ANALYTICS SYSTEM	30	30	32
Christopher R. Olmsted	2100-3855	CLINT SERVICES MAINTENANCE & SUPPORT	0	0	0
Christopher R. Olmsted	2100-3856	VOICE LEASED CIRCUITS	105	44	47
Christopher R. Olmsted	2100-3884	MGD SVC VOICE ENTERP	37	108	115
Christopher R. Olmsted	2100-3885	VOICE ENTERP SUPPORT	23	23	24
Christopher R. Olmsted	2100-3888	IT PORTFOLIO MANAGEMENT	3	3	3
Christopher R. Olmsted	2100-3900	IT PORTFOLIO MANAGEMENT	13	13	14
Christopher R. Olmsted	2100-3916	BI & ANALYTICS ENGINEERING-SAS CONTRACTS	182	217	232
Christopher R. Olmsted	2100-3921	IT&OTI CONTRACTS SS	442	470	502
Christopher R. Olmsted	2100-3924	BI & ANALYTICS OPS-SAP CONTRACTS	55	66	71
Christopher R. Olmsted	2100-3926	IT Communications	7	9	9
Christopher R. Olmsted	2100-3954	IT TELECOM PMO	4	4	4
Christopher R. Olmsted	2100-3975	SDGE NETWORK ENGINEERING	12	12	13
Christopher R. Olmsted	2100-3979	SCG IT INFRA SERVICES - DIRECTOR	-	0	0
		Total	2,481	2,619	2,798
Gavin H. Worden	2100-3101	SECURITY POLICY AND AWARENESS	43	43	46
Gavin H. Worden	2100-3763	DIRECTOR - INFORMATION SECURITY	17	17	18
Gavin H. Worden	2100-3774	SECURITY ENGINEERING	45	65	69
Gavin H. Worden	2100-3775	SECURITY OPERATIONS	74	79	84
Gavin H. Worden	2100-3781	CRITICAL INFRASTRUCTURE PROTECTION	116	152	152
Gavin H. Worden	2100-3976	INFORMATION SECURITY PROGRAMS	1	1	1
		Total	296	356	370
		Total SS	2,777	2,975	3,168
		Total IT Generation	\$ 3,218	\$ 3,869	\$ 4,118

Table KN-35
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
Christopher R. Olmsted	1IT001	IT Applications NSS	4,315	5,346	5,731
Christopher R. Olmsted	1IT002	IT Infrastructue NSS	902	3,754	3,971
Christopher R. Olmsted	1IT003	IT Support NSS	(0)	(728)	(776)
		Total	5,216	8,373	8,926
Christopher R. Olmsted	2100-0207	TELECOM FIELD VOICE - SDGE	505	505	540
Christopher R. Olmsted	2100-3071	SAP ACCOUNTING & FINANCIAL SYSTEMS	400	400	427
Christopher R. Olmsted	2100-3072	SUPPLY CHAIN & LOGISTICS SYSTEMS	389	388	415
Christopher R. Olmsted	2100-3073	ENTERPRISE INTEGRATION SERVICES	409	408	436
Christopher R. Olmsted	2100-3074	SSDS PROJECT OFFICE	161	161	172
Christopher R. Olmsted	2100-3088	SOFTWARE DEV - WORK MEAS SYSTEMS	81	80	86
Christopher R. Olmsted	2100-3089	BUSINESS INTELLIGENCE GROUP	221	221	236
Christopher R. Olmsted	2100-3091	SOFTWARE DEV - DATABASE ADMINISTRATOR	511	511	546
Christopher R. Olmsted	2100-3095	NETORK COMMUNICATION SERVICES DIRECTOR	8	8	9
Christopher R. Olmsted	2100-3097	CLIENT TECHNOLOGY & DEPOT SERVICES	409	409	437
Christopher R. Olmsted	2100-3099	DESKTOP HARDWARE	0	(0)	(0)
Christopher R. Olmsted	2100-3100	MIDDLEWARE AND INTERNET ENGINEERING	141	141	150
Christopher R. Olmsted	2100-3102	INFRASTRUCTURE ENG & OPS DIRECTOR	76	134	143
Christopher R. Olmsted	2100-3106	NETWORK/TELECOM SERVICES - SDG&E	1,459	1,521	1,625
Christopher R. Olmsted	2100-3107	ENTERPRISE OPERATIONS	0	0	1
Christopher R. Olmsted	2100-3161	CHIEF ADMIN OFFICER	147	147	157
Christopher R. Olmsted	2100-3317	IT ACCOUNT MANAGEMENT	166	166	177
Christopher R. Olmsted	2100-3334	SERVER MANAGEMENT	219	219	234
Christopher R. Olmsted	2100-3498	INFRASTRUCTURE PROGRAM OFFICE	91	91	97
Christopher R. Olmsted	2100-3500	IT NETWORK FIELD - LAN/WAN VOICE	(1)	0	0
Christopher R. Olmsted	2100-3502	ENTERPRISE COMMAND CENTER	515	515	551
Christopher R. Olmsted	2100-3623	SHARED SOFTWARE DEVELOPMENT CONTRACTS	1,304	1,544	1,650
Christopher R. Olmsted	2100-3683	PROJECT IMPROVEMENT OFFICE-NCS	54	53	57

Table KN-35
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
INFORMATION TECHNOLOGY GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Christopher R. Olmsted	2100-3684	SERVICE DELIVERY - NCS	190	190	203
Christopher R. Olmsted	2100-3698	SERVICE DEVELOPMENT PROGRAM MANAGEMENT	72	72	77
Christopher R. Olmsted	2100-3699	CUSTOMER ANALYTICS SYSTEM	120	120	128
Christopher R. Olmsted	2100-3713	FIELD FORCE PROGRAM DELIVERY TEAM	14	14	14
Christopher R. Olmsted	2100-3733	SVP & CITO	307	208	223
Christopher R. Olmsted	2100-3807	ENTERPRISE FINANCIAL & OPS SOLUTION	37	37	40
Christopher R. Olmsted	2100-3814	DIRECTOR IT INFRASTRUCTURE	213	271	290
Christopher R. Olmsted	2100-3824	INFRASTR PRGRM OFFICE	222	187	200
Christopher R. Olmsted	2100-3842	IT ASSOCIATE PROGRAM	334	350	374
Christopher R. Olmsted	2100-3848	CUSTOMER ANALYTICS SYSTEM	165	166	177
Christopher R. Olmsted	2100-3855	CLINT SERVICES MAINTENANCE & SUPPORT	0	1	1
Christopher R. Olmsted	2100-3856	VOICE LEASED CIRCUITS	575	241	257
Christopher R. Olmsted	2100-3884	MGD SVC VOICE ENTERP	206	592	633
Christopher R. Olmsted	2100-3885	VOICE ENTERP SUPPORT	124	124	133
Christopher R. Olmsted	2100-3888	IT PORTFOLIO MANAGEMENT	17	17	18
Christopher R. Olmsted	2100-3900	IT PORTFOLIO MANAGEMENT	71	71	76
Christopher R. Olmsted	2100-3916	BI & ANALYTICS ENGINEERING-SAS CONTRACTS	999	1,190	1,271
Christopher R. Olmsted	2100-3921	IT&OTI CONTRACTS SS	2,424	2,578	2,754
Christopher R. Olmsted	2100-3924	BI & ANALYTICS OPS-SAP CONTRACTS	305	363	387
Christopher R. Olmsted	2100-3926	IT Communications	40	48	51
Christopher R. Olmsted	2100-3954	IT TELECOM PMO	22	22	23
Christopher R. Olmsted	2100-3975	SDGE NETWORK ENGINEERING	68	68	72
Christopher R. Olmsted	2100-3979	SCG IT INFRA SERVICES - DIRECTOR	-	0	0
Total			13,789	14,553	15,549
Gavin H. Worden	2100-3101	SECURITY POLICY AND AWARENESS	236	236	253
Gavin H. Worden	2100-3763	DIRECTOR - INFORMATION SECURITY	91	91	97
Gavin H. Worden	2100-3774	SECURITY ENGINEERING	245	354	378
Gavin H. Worden	2100-3775	SECURITY OPERATIONS	406	434	464
Gavin H. Worden	2100-3781	CRITICAL INFRASTRUCTURE PROTECTION	639	832	832
Gavin H. Worden	2100-3976	INFORMATION SECURITY PROGRAMS	5	5	6
Total			1,622	1,953	2,030
Total SS			15,411	16,506	17,578
Total IT Gas			\$ 20,627	\$ 24,879	\$ 26,504

Table KN-36
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Nancy C. Clancy	1EV000	ENVIRONMENTAL SDGE NSS Cost Center	5,021	4,016	4,331
Nancy C. Clancy	1EV001	RNERBA-AB32 Fees-Electric	287	303	323
Nancy C. Clancy	1EV002	RNERBA-AB32 Fees-Gas	517	532	566
		Environmental Total	<u>5,825</u>	<u>4,851</u>	<u>5,220</u>
Richard D. Tattersall	1RE001	SDGE Facility Operations	8,307	8,378	8,947
Richard D. Tattersall	1RE002	Land Services	939	692	742
Richard D. Tattersall	1RE003	SDGE Rents	17,028	17,513	17,513
		Real Estate & Facilities Total	<u>26,274</u>	<u>26,583</u>	<u>27,202</u>
Carmen L. Herrera	1FS001	Amortization	10,116	24,489	24,489
Carmen L. Herrera	1FS002	Maintenance Operations	15,747	18,802	20,167
Carmen L. Herrera	1FS005	Maintenance Management	928	764	829
Carmen L. Herrera	1FS006	Director	(204)	(216)	(230)
		Fleet Total	<u>26,587</u>	<u>43,839</u>	<u>45,254</u>
Denita A. Willoughby	1SS001	Logistics Shops South - Pool Warehousing	3,781	4,119	4,474
Denita A. Willoughby	1SS003	Office Services	2,185	2,229	2,373
Denita A. Willoughby	1SS004	Logistics Shops South - Pool Purchasing	909	921	1,001
Denita A. Willoughby	1SS005	Supplier Diversity	854	1,042	1,123
Denita A. Willoughby	1SS006	Electric Portfolio	948	976	1,060
Denita A. Willoughby	1SS007	STRATEGY & SUSTAINABILITY	997	(304)	(323)
		Supply Management Total	<u>9,674</u>	<u>8,983</u>	<u>9,708</u>
		Total NSS	<u>68,360</u>	<u>84,256</u>	<u>87,384</u>
Nancy C. Clancy	2100-0632	ENVIRONMENTAL LAB OPERATIONS	1,092	660	705
Nancy C. Clancy	2100-3282	ENVIRONMENTAL COMMUNICATIONS	731	758	810
Nancy C. Clancy	2100-3588	VP OPERATIONS SUPPORT	440	440	470
Nancy C. Clancy	2100-3589	ENVIRONMENTAL SERVICES DIRECTOR	249	250	267
		Environmental Total	<u>2,512</u>	<u>2,107</u>	<u>2,252</u>

Table KN-36
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Richard D. Tattersall	2100-0706	RE PLANNING	1,026	1,062	1,134
Richard D. Tattersall	2100-0708	HQ RENT & FACILITIES MAINTENANCE	2,791	2,220	2,372
Richard D. Tattersall	2100-3025	FACILITIES & CAPITAL PROGRAMS - ADMIN	147	129	138
Richard D. Tattersall	2100-3028	FACILITIES CORPORATE CENTER PROJECTS	26	37	40
Richard D. Tattersall	2100-3030	CORPORATE REAL ESTATE MANAGER	324	231	246
Richard D. Tattersall	2100-3303	RE RESOURCES	492	491	525
Richard D. Tattersall	2100-3323	FACILITIES OPERATIONS SOUTH MANAGER	559	492	525
Richard D. Tattersall	2100-3610	RB DATA CENTER & ANNEX	771	758	809
Richard D. Tattersall	2100-3714	DIRECTOR - REAL ESTATE & LAND SERVICES	352	415	443
Richard D. Tattersall	2100-3977	RE PLANNING-MAC	11	11	12
		Real Estate & Facilities Total	<u>6,499</u>	<u>5,846</u>	<u>6,245</u>
Carmen L. Herrera	2100-0203	SDGE FLEET ASSET	1,001	987	1,055
Carmen L. Herrera	2100-3411	FLEET SYSTEMS SUPPORT	261	388	414
Carmen L. Herrera	2100-3412	FLEET FINANCIAL SUPPORT	94	139	149
Carmen L. Herrera	2100-3952	FLEET PROJECTS & PROGRAMS	-	103	110
		Fleet Total	<u>1,356</u>	<u>1,617</u>	<u>1,728</u>
Denita A. Willoughby	2100-3013	SUPPLY MANAGEMENT DIRECTOR	550	1,111	1,186
Denita A. Willoughby	2100-3016	SUPPLY MANAGEMENT DIRECTOR	716	720	769
Denita A. Willoughby	2100-3018	SUPPLY MANAGEMENT DIRECTOR	273	226	241
Denita A. Willoughby	2100-3266	SUPPLY MANAGEMENT DIRECTOR	739	735	785
Denita A. Willoughby	2100-3331	SUPPLY MANAGEMENT DIRECTOR	893	803	858
Denita A. Willoughby	2100-3332	SUPPLY MANAGEMENT DIRECTOR	810	755	807
Denita A. Willoughby	2100-3407	SUPPLY MANAGEMENT DIRECTOR	277	339	362
		Supply Management Total	<u>4,258</u>	<u>4,688</u>	<u>5,008</u>
		Total SS	<u>14,625</u>	<u>14,258</u>	<u>15,233</u>
		Total Support Services	<u>\$ 82,985</u>	<u>\$ 98,514</u>	<u>\$ 102,617</u>

Table KN-37
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Nancy C. Clancy	1EV000	ENVIRONMENTAL SDGE NSS Cost Center	4,320	3,455	3,726
Nancy C. Clancy	1EV001	RNERBA-AB32 Fees-Electric	287	303	323
Nancy C. Clancy	1EV002	RNERBA-AB32 Fees-Gas	-	-	-
		Total	<u>4,607</u>	<u>3,758</u>	<u>4,049</u>
Richard D. Tattersall	1RE001	SDGE Facility Operations	6,255	6,309	6,737
Richard D. Tattersall	1RE002	Land Services	842	620	665
Richard D. Tattersall	1RE003	SDGE Rents	12,822	13,187	13,187
		Total	<u>19,919</u>	<u>20,116</u>	<u>20,589</u>
Carmen L. Herrera	1FS001	Amortization	7,931	19,199	19,199
Carmen L. Herrera	1FS002	Maintenance Operations	12,346	14,741	15,811
Carmen L. Herrera	1FS005	Maintenance Management	728	599	650
Carmen L. Herrera	1FS006	Director	(160)	(169)	(180)
		Total	<u>20,844</u>	<u>34,370</u>	<u>35,480</u>
Denita A. Willoughby	1SS001	Logistics Shops South - Pool Warehousing	3,441	3,748	4,071
Denita A. Willoughby	1SS003	Office Services	1,645	1,678	1,787
Denita A. Willoughby	1SS004	Logistics Shops South - Pool Purchasing	708	717	779
Denita A. Willoughby	1SS005	Supplier Diversity	665	812	875
Denita A. Willoughby	1SS006	Electric Portfolio	738	760	826
Denita A. Willoughby	1SS007	STRATEGY & SUSTAINABILITY	777	(237)	(251)
		Total	<u>7,975</u>	<u>7,479</u>	<u>8,087</u>
		Total NSS	<u>53,344</u>	<u>65,723</u>	<u>68,204</u>
Nancy C. Clancy	2100-0632	ENVIRONMENTAL LAB OPERATIONS	1,011	611	653
Nancy C. Clancy	2100-3282	ENVIRONMENTAL COMMUNICATIONS	550	571	610
Nancy C. Clancy	2100-3588	VP OPERATIONS SUPPORT	331	331	354
Nancy C. Clancy	2100-3589	ENVIRONMENTAL SERVICES DIRECTOR	178	178	191
		Total	<u>2,071</u>	<u>1,692</u>	<u>1,807</u>

Table KN-37
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Richard D. Tattersall	2100-0706	RE PLANNING	773	799	854
Richard D. Tattersall	2100-0708	HQ RENT & FACILITIES MAINTENANCE	2,102	1,672	1,786
Richard D. Tattersall	2100-3025	FACILITIES & CAPITAL PROGRAMS - ADMIN	111	97	104
Richard D. Tattersall	2100-3028	FACILITIES CORPORATE CENTER PROJECTS	20	28	30
Richard D. Tattersall	2100-3030	CORPORATE REAL ESTATE MANAGER	204	145	155
Richard D. Tattersall	2100-3303	RE RESOURCES	370	370	395
Richard D. Tattersall	2100-3323	FACILITIES OPERATIONS SOUTH MANAGER	416	366	391
Richard D. Tattersall	2100-3610	RB DATA CENTER & ANNEX	581	570	609
Richard D. Tattersall	2100-3714	DIRECTOR - REAL ESTATE & LAND SERVICES	265	312	334
Richard D. Tattersall	2100-3977	RE PLANNING-MAC	8	9	9
		Total	<u>4,849</u>	<u>4,369</u>	<u>4,668</u>
Carmen L. Herrera	2100-0203	SDGE FLEET ASSET	785	774	827
Carmen L. Herrera	2100-3411	FLEET SYSTEMS SUPPORT	205	304	325
Carmen L. Herrera	2100-3412	FLEET FINANCIAL SUPPORT	74	109	117
Carmen L. Herrera	2100-3952	FLEET PROJECTS & PROGRAMS	-	81	86
		Total	<u>1,063</u>	<u>1,268</u>	<u>1,355</u>
Denita A. Willoughby	2100-3013	SUPPLY MANAGEMENT DIRECTOR	428	865	924
Denita A. Willoughby	2100-3016	SUPPLY MANAGEMENT DIRECTOR	558	561	599
Denita A. Willoughby	2100-3018	SUPPLY MANAGEMENT DIRECTOR	206	170	182
Denita A. Willoughby	2100-3266	SUPPLY MANAGEMENT DIRECTOR	556	554	591
Denita A. Willoughby	2100-3331	SUPPLY MANAGEMENT DIRECTOR	694	624	667
Denita A. Willoughby	2100-3332	SUPPLY MANAGEMENT DIRECTOR	631	588	628
Denita A. Willoughby	2100-3407	SUPPLY MANAGEMENT DIRECTOR	195	239	255
		Total	<u>3,269</u>	<u>3,600</u>	<u>3,847</u>
		Total SS	<u>11,252</u>	<u>10,929</u>	<u>11,676</u>
		Total Support Services Electric Department	<u>\$ 64,596</u>	<u>\$ 76,652</u>	<u>\$ 79,881</u>

Table KN-38
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Nancy C. Clancy	1EV000	ENVIRONMENTAL SDGE NSS Cost Center	4,192	3,353	3,616
Nancy C. Clancy	1EV001	RNERBA-AB32 Fees-Electric	-	16	17
Nancy C. Clancy	1EV002	RNERBA-AB32 Fees-Gas	-	-	-
		Total	<u>4,192</u>	<u>3,369</u>	<u>3,633</u>
Richard D. Tattersall	1RE001	SDGE Facility Operations	5,881	5,932	6,334
Richard D. Tattersall	1RE002	Land Services	824	607	651
Richard D. Tattersall	1RE003	SDGE Rents	12,056	12,399	12,399
		Total	<u>18,761</u>	<u>18,938</u>	<u>19,384</u>
Carmen L. Herrera	1FS001	Amortization	7,911	19,150	19,150
Carmen L. Herrera	1FS002	Maintenance Operations	12,314	14,703	15,770
Carmen L. Herrera	1FS005	Maintenance Management	726	597	648
Carmen L. Herrera	1FS006	Director	(160)	(169)	(180)
		Total	<u>20,791</u>	<u>34,282</u>	<u>35,389</u>
Denita A. Willoughby	1SS001	Logistics Shops South - Pool Warehousing	3,395	3,699	4,018
Denita A. Willoughby	1SS003	Office Services	1,547	1,578	1,680
Denita A. Willoughby	1SS004	Logistics Shops South - Pool Purchasing	678	687	746
Denita A. Willoughby	1SS005	Supplier Diversity	637	777	838
Denita A. Willoughby	1SS006	Electric Portfolio	707	728	791
Denita A. Willoughby	1SS007	STRATEGY & SUSTAINABILITY	744	(227)	(241)
		Total	<u>7,708</u>	<u>7,243</u>	<u>7,832</u>
		Total NSS	<u>51,453</u>	<u>63,832</u>	<u>66,238</u>
Nancy C. Clancy	2100-0632	ENVIRONMENTAL LAB OPERATIONS	1,008	609	651
Nancy C. Clancy	2100-3282	ENVIRONMENTAL COMMUNICATIONS	518	537	573
Nancy C. Clancy	2100-3588	VP OPERATIONS SUPPORT	312	312	333
Nancy C. Clancy	2100-3589	ENVIRONMENTAL SERVICES DIRECTOR	167	168	179
		Total	<u>2,005</u>	<u>1,625</u>	<u>1,736</u>

Table KN-38
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Richard D. Tattersall	2100-0706	RE PLANNING	726	752	803
Richard D. Tattersall	2100-0708	HQ RENT & FACILITIES MAINTENANCE	1,976	1,572	1,679
Richard D. Tattersall	2100-3025	FACILITIES & CAPITAL PROGRAMS - ADMIN	104	92	98
Richard D. Tattersall	2100-3028	FACILITIES CORPORATE CENTER PROJECTS	18	26	28
Richard D. Tattersall	2100-3030	CORPORATE REAL ESTATE MANAGER	192	136	146
Richard D. Tattersall	2100-3303	RE RESOURCES	348	348	372
Richard D. Tattersall	2100-3323	FACILITIES OPERATIONS SOUTH MANAGER	393	346	369
Richard D. Tattersall	2100-3610	RB DATA CENTER & ANNEX	546	536	573
Richard D. Tattersall	2100-3714	DIRECTOR - REAL ESTATE & LAND SERVICES	249	294	314
Richard D. Tattersall	2100-3977	RE PLANNING-MAC	8	8	9
		Total	<u>4,561</u>	<u>4,109</u>	<u>4,391</u>
Carmen L. Herrera	2100-0203	SDGE FLEET ASSET	783	772	825
Carmen L. Herrera	2100-3411	FLEET SYSTEMS SUPPORT	204	303	324
Carmen L. Herrera	2100-3412	FLEET FINANCIAL SUPPORT	74	109	116
Carmen L. Herrera	2100-3952	FLEET PROJECTS & PROGRAMS	-	81	86
		Total	<u>1,060</u>	<u>1,265</u>	<u>1,351</u>
Denita A. Willoughby	2100-3013	SUPPLY MANAGEMENT DIRECTOR	410	828	885
Denita A. Willoughby	2100-3016	SUPPLY MANAGEMENT DIRECTOR	534	537	574
Denita A. Willoughby	2100-3018	SUPPLY MANAGEMENT DIRECTOR	193	160	171
Denita A. Willoughby	2100-3266	SUPPLY MANAGEMENT DIRECTOR	523	520	556
Denita A. Willoughby	2100-3331	SUPPLY MANAGEMENT DIRECTOR	664	597	638
Denita A. Willoughby	2100-3332	SUPPLY MANAGEMENT DIRECTOR	604	563	602
Denita A. Willoughby	2100-3407	SUPPLY MANAGEMENT DIRECTOR	183	224	240
		Total	<u>3,113</u>	<u>3,431</u>	<u>3,665</u>
		Total SS	<u>10,739</u>	<u>10,430</u>	<u>11,143</u>
		Total Support Services Electric Distribution	<u>\$ 62,191</u>	<u>\$ 74,261</u>	<u>\$ 77,382</u>

Table KN-39
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Nancy C. Clancy	1EV000	ENVIRONMENTAL SDGE NSS Cost Center	128	102	110
Nancy C. Clancy	1EV001	RNERBA-AB32 Fees-Electric	287	287	306
Nancy C. Clancy	1EV002	RNERBA-AB32 Fees-Gas	-	-	-
		Total	<u>415</u>	<u>389</u>	<u>416</u>
Richard D. Tattersall	1RE001	SDGE Facility Operations	374	377	403
Richard D. Tattersall	1RE002	Land Services	18	13	14
Richard D. Tattersall	1RE003	SDGE Rents	766	788	788
		Total	<u>1,158</u>	<u>1,178</u>	<u>1,205</u>
Carmen L. Herrera	1FS001	Amortization	20	49	49
Carmen L. Herrera	1FS002	Maintenance Operations	31	38	40
Carmen L. Herrera	1FS005	Maintenance Management	2	2	2
Carmen L. Herrera	1FS006	Director	(0)	(0)	(0)
		Total	<u>53</u>	<u>88</u>	<u>91</u>
Denita A. Willoughby	1SS001	Logistics Shops South - Pool Warehousing	45	49	54
Denita A. Willoughby	1SS003	Office Services	98	100	107
Denita A. Willoughby	1SS004	Logistics Shops South - Pool Purchasing	30	30	33
Denita A. Willoughby	1SS005	Supplier Diversity	28	34	37
Denita A. Willoughby	1SS006	Electric Portfolio	31	32	35
Denita A. Willoughby	1SS007	STRATEGY & SUSTAINABILITY	33	(10)	(11)
		Total	<u>266</u>	<u>237</u>	<u>255</u>
		Total NSS	<u>1,892</u>	<u>1,892</u>	<u>1,966</u>
Nancy C. Clancy	2100-0632	ENVIRONMENTAL LAB OPERATIONS	3	2	2
Nancy C. Clancy	2100-3282	ENVIRONMENTAL COMMUNICATIONS	33	34	36
Nancy C. Clancy	2100-3588	VP OPERATIONS SUPPORT	20	20	21
Nancy C. Clancy	2100-3589	ENVIRONMENTAL SERVICES DIRECTOR	11	11	11
		Total	<u>66</u>	<u>66</u>	<u>71</u>

Table KN-39
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Richard D. Tattersall	2100-0706	RE PLANNING	46	48	51
Richard D. Tattersall	2100-0708	HQ RENT & FACILITIES MAINTENANCE	126	100	107
Richard D. Tattersall	2100-3025	FACILITIES & CAPITAL PROGRAMS - ADMIN	7	6	6
Richard D. Tattersall	2100-3028	FACILITIES CORPORATE CENTER PROJECTS	1	2	2
Richard D. Tattersall	2100-3030	CORPORATE REAL ESTATE MANAGER	12	9	9
Richard D. Tattersall	2100-3303	RE RESOURCES	22	22	24
Richard D. Tattersall	2100-3323	FACILITIES OPERATIONS SOUTH MANAGER	23	20	22
Richard D. Tattersall	2100-3610	RB DATA CENTER & ANNEX	35	34	36
Richard D. Tattersall	2100-3714	DIRECTOR - REAL ESTATE & LAND SERVICES	16	19	20
Richard D. Tattersall	2100-3977	RE PLANNING-MAC	0	1	1
		Total	<u>288</u>	<u>259</u>	<u>277</u>
Carmen L. Herrera	2100-0203	SDGE FLEET ASSET	2	2	2
Carmen L. Herrera	2100-3411	FLEET SYSTEMS SUPPORT	1	1	1
Carmen L. Herrera	2100-3412	FLEET FINANCIAL SUPPORT	0	0	0
Carmen L. Herrera	2100-3952	FLEET PROJECTS & PROGRAMS	-	0	0
		Total	<u>3</u>	<u>3</u>	<u>3</u>
Denita A. Willoughby	2100-3013	SUPPLY MANAGEMENT DIRECTOR	18	37	39
Denita A. Willoughby	2100-3016	SUPPLY MANAGEMENT DIRECTOR	24	24	25
Denita A. Willoughby	2100-3018	SUPPLY MANAGEMENT DIRECTOR	12	10	11
Denita A. Willoughby	2100-3266	SUPPLY MANAGEMENT DIRECTOR	33	33	35
Denita A. Willoughby	2100-3331	SUPPLY MANAGEMENT DIRECTOR	30	27	29
Denita A. Willoughby	2100-3332	SUPPLY MANAGEMENT DIRECTOR	27	25	27
Denita A. Willoughby	2100-3407	SUPPLY MANAGEMENT DIRECTOR	12	14	15
		Total	<u>156</u>	<u>170</u>	<u>181</u>
		Total SS	<u>513</u>	<u>499</u>	<u>533</u>
		Total Support Services Generation	<u>\$ 2,405</u>	<u>\$ 2,391</u>	<u>\$ 2,499</u>

Table KN-40
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Nancy C. Clancy	1EV000	ENVIRONMENTAL SDGE NSS Cost Center	701	561	605
Nancy C. Clancy	1EV001	RNERBA-AB32 Fees-Electric	-	-	-
Nancy C. Clancy	1EV002	RNERBA-AB32 Fees-Gas	517	532	566
		Total	1,218	1,093	1,171
Richard D. Tattersall	1RE001	SDGE Facility Operations	2,052	2,069	2,210
Richard D. Tattersall	1RE002	Land Services	97	72	77
Richard D. Tattersall	1RE003	SDGE Rents	4,206	4,326	4,326
		Total	6,355	6,467	6,612
Carmen L. Herrera	1FS001	Amortization	2,185	5,290	5,290
Carmen L. Herrera	1FS002	Maintenance Operations	3,401	4,061	4,356
Carmen L. Herrera	1FS005	Maintenance Management	200	165	179
Carmen L. Herrera	1FS006	Director	(44)	(47)	(50)
		Total	5,743	9,469	9,775
Denita A. Willoughby	1SS001	Logistics Shops South - Pool Warehousing	340	371	403
Denita A. Willoughby	1SS003	Office Services	540	551	586
Denita A. Willoughby	1SS004	Logistics Shops South - Pool Purchasing	201	204	221
Denita A. Willoughby	1SS005	Supplier Diversity	189	230	248
Denita A. Willoughby	1SS006	Electric Portfolio	210	216	234
Denita A. Willoughby	1SS007	STRATEGY & SUSTAINABILITY	220	(67)	(71)
		Total	1,699	1,504	1,621
		Total NSS	15,016	18,533	19,180
Nancy C. Clancy	2100-0632	ENVIRONMENTAL LAB OPERATIONS	81	49	52
Nancy C. Clancy	2100-3282	ENVIRONMENTAL COMMUNICATIONS	181	187	200
Nancy C. Clancy	2100-3588	VP OPERATIONS SUPPORT	109	109	116
Nancy C. Clancy	2100-3589	ENVIRONMENTAL SERVICES DIRECTOR	71	71	76
		Total	441	416	444

Table KN-40
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
SUPPORT SERVICES GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Richard D. Tattersall	2100-0706	RE PLANNING	253	262	280
Richard D. Tattersall	2100-0708	HQ RENT & FACILITIES MAINTENANCE	689	548	586
Richard D. Tattersall	2100-3025	FACILITIES & CAPITAL PROGRAMS - ADMIN	36	32	34
Richard D. Tattersall	2100-3028	FACILITIES CORPORATE CENTER PROJECTS	6	9	10
Richard D. Tattersall	2100-3030	CORPORATE REAL ESTATE MANAGER	120	85	91
Richard D. Tattersall	2100-3303	RE RESOURCES	122	121	130
Richard D. Tattersall	2100-3323	FACILITIES OPERATIONS SOUTH MANAGER	143	126	134
Richard D. Tattersall	2100-3610	RB DATA CENTER & ANNEX	190	187	200
Richard D. Tattersall	2100-3714	DIRECTOR - REAL ESTATE & LAND SERVICES	87	103	110
Richard D. Tattersall	2100-3977	RE PLANNING-MAC	3	3	3
		Total	<u>1,650</u>	<u>1,477</u>	<u>1,578</u>
Carmen L. Herrera	2100-0203	SDGE FLEET ASSET	216	213	228
Carmen L. Herrera	2100-3411	FLEET SYSTEMS SUPPORT	56	84	89
Carmen L. Herrera	2100-3412	FLEET FINANCIAL SUPPORT	20	30	32
Carmen L. Herrera	2100-3952	FLEET PROJECTS & PROGRAMS	-	22	24
		Total	<u>293</u>	<u>349</u>	<u>373</u>
Denita A. Willoughby	2100-3013	SUPPLY MANAGEMENT DIRECTOR	122	245	262
Denita A. Willoughby	2100-3016	SUPPLY MANAGEMENT DIRECTOR	158	159	170
Denita A. Willoughby	2100-3018	SUPPLY MANAGEMENT DIRECTOR	67	56	60
Denita A. Willoughby	2100-3266	SUPPLY MANAGEMENT DIRECTOR	183	182	194
Denita A. Willoughby	2100-3331	SUPPLY MANAGEMENT DIRECTOR	199	179	191
Denita A. Willoughby	2100-3332	SUPPLY MANAGEMENT DIRECTOR	179	167	178
Denita A. Willoughby	2100-3407	SUPPLY MANAGEMENT DIRECTOR	82	100	107
		Total	<u>989</u>	<u>1,087</u>	<u>1,162</u>
		Total SS	<u>3,373</u>	<u>3,329</u>	<u>3,557</u>
		Total Support Services Gas	<u>\$ 18,389</u>	<u>\$ 21,862</u>	<u>\$ 22,737</u>

Table KN-41
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
ADMINISTRATIVE AND GENERAL COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Sandra K. Hrna	1AG001	Oper CCTR-NSS-Controllers -Plng & Reg Accts	3,965	4,083	4,437
Sandra K. Hrna	1AG002	Oper CCTR-NSS-Controllers -Fin Sys & Bus Controls	455	468	509
Sandra K. Hrna	1AG003	Oper CCTR-NSS-Controllers -Cost Accounting	2,012	1,980	2,150
Sandra K. Hrna	1AG004	Oper CCTR-NSS-Controllers -Sundry Billing	688	835	908
Sandra K. Hrna	1AG005	Oper CCTR-NSS-Controllers -MARP	186	212	230
Sandra K. Hrna	1AG006	Oper CCTR-NSS-Legal -Legal	8,771	8,744	9,493
Sandra K. Hrna	1AG007	Oper CCTR-NSS-Legal -Claims	678	906	984
Sandra K. Hrna	1AG008	Oper CCTR-NSS-Legal -Claims Payments and Recovery Costs	6,591	3,763	4,007
Sandra K. Hrna	1AG009	Oper CCTR-NSS-Regulatory Affairs -SDG&E Tariff	1,050	63,290	63,378
Sandra K. Hrna	1AG012	Oper CCTR-NSS-Use for Acctg Closing -Community Relations	39	31	33
Sandra K. Hrna	1AG014	Other 925 Damages	-	-	-
		Total	<u>24,435</u>	<u>84,312</u>	<u>86,129</u>
Debbie S. Robinson	1PB000	HEALTH BENEFITS-MEDICAL	69,405	85,865	85,865
Debbie S. Robinson	1CP000	COMPENSATION - VARIABLE PAY (GRC USE ONLY)	75,858	78,422	84,463
		Total	<u>145,263</u>	<u>164,287</u>	<u>170,328</u>
Tashonda Taylor	1HR000	Chief HR and Chief Administrative Officer	516	597	646
Tashonda Taylor	1HR001	Safety Wellness and Disability Svcs	1,085	1,694	1,819
Tashonda Taylor	1HR002	Long-Term Disability (LTD)	4,089	5,824	5,824
Tashonda Taylor	1HR003	Diversity and Workforce Management	2,121	1,986	2,139
Tashonda Taylor	1HR004	Organizational Effectiveness	1,807	2,177	2,352
Tashonda Taylor	1HR005	Employee Communications	338	338	365
Tashonda Taylor	1HR007	HR Diversity	150	175	189
Tashonda Taylor	1HR008	Offices of the President and COO	2,775	2,395	2,572
		Total	<u>12,881</u>	<u>15,186</u>	<u>15,905</u>
Debbie S. Robinson	1PN000	EMPLOYEE PENSION	2,357	65,400	65,400
		Total	<u>2,357</u>	<u>65,400</u>	<u>65,400</u>
Mia L. DeMontigny	1SE000	SECC OUTSIDE SERVICES EMPLOYES - F923.1	59,200	61,127	61,127
		Total	<u>59,200</u>	<u>61,127</u>	<u>61,127</u>
Neil K. Cayabyab	1SN000	SECC PROPERTY INSURANCE NON-NUCLEAR - 924.0	107,362	126,270	126,270
		Total	<u>107,362</u>	<u>126,270</u>	<u>126,270</u>
		Total NSS	<u>351,498</u>	<u>516,582</u>	<u>525,159</u>

Table KN-41
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
ADMINISTRATIVE AND GENERAL COMBINED
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
Sandra K. Hrna	2100-0006	Oper CCTR-USS-Regulatory Affairs -GRC & Rev Req	-	-	-
Sandra K. Hrna	2100-0274	Oper CCTR-USS-Controllers -AFFIL BILLING & COSTING	436	477	509
Sandra K. Hrna	2100-0657	Oper CCTR-USS-Controllers -VP	16	120	128
Sandra K. Hrna	2100-3050	Oper CCTR-USS-Controllers -UTILITY ACCTG DIR & STAFF	269	293	313
Sandra K. Hrna	2100-3051	Oper CCTR-USS-Controllers -FINANCIAL ACCOUNTING	903	909	971
Sandra K. Hrna	2100-3052	Oper CCTR-USS-Controllers -REGULATORY REPORTING	735	802	857
Sandra K. Hrna	2100-3058	Oper CCTR-USS-Controllers -ACCOUNTS PAYABLE	1,279	1,086	1,160
Sandra K. Hrna	2100-3067	Oper CCTR-USS-Controllers -IT BUSINESS PLNG & BUDGETS	807	746	797
Sandra K. Hrna	2100-3162	Oper CCTR-USS-Regulatory Affairs -VP	1,242	1,146	1,224
Sandra K. Hrna	2100-3427	Oper CCTR-USS-Regulatory Affairs - Case Management	1,970	2,227	2,380
Sandra K. Hrna	2100-3430	Oper CCTR-USS-Regulatory Affairs -GRC & Reg Case Support	436	475	508
Sandra K. Hrna	2100-3555	Oper CCTR-USS-Controllers -BUSINESS CONTROLS	487	744	795
Sandra K. Hrna	2100-3602	Oper CCTR-USS-Regulatory Affairs -GRC Data Analysis	696	774	827
Sandra K. Hrna	2100-3716	Oper CCTR-USS-Regulatory Affairs Rates & Demand Analysis	116	112	120
Sandra K. Hrna	2100-3791	Oper CCTR-USS-Extrnl&State Legis Affrs-VP	916	727	777
Sandra K. Hrna	2100-3798	Oper CCTR-USS-Controllers -BANK REC & ESCHEATMENT	488	483	516
Sandra K. Hrna	2100-3808	Oper CCTR-USS-Regulatory Affairs CPUC/FERC Gas Cases	127	127	136
Sandra K. Hrna	2100-4006	Oper CCTR-USS-Extrnl&State Legis Affrs-Reg Policy & Leg Analysis	180	315	337
Sandra K. Hrna	2100-4008	Oper CCTR-USS-Extrnl&State Legis Affrs-Media Relations	960	973	1,040
Sandra K. Hrna	2100-4009	Oper CCTR-USS-Extrnl&State Legis Affrs-Community Relations	1,066	1,025	1,095
Sandra K. Hrna	2100-7100	Compliance and Financial Systems Director	258	296	316
		Total	13,387	13,856	14,804
Diana L. Day	2100-3590	Risk Management	2,656	3,860	4,124
Diana L. Day	2100-3934	VP ENTERPRISE RISK MANAGEMENT	398	431	460
Diana L. Day	2100-3945	OPERATIONS RISK MANAGEMENT SDG&E	1,227	2,452	2,620
		Total	4,281	6,744	7,205
Tashonda Taylor	2100-0214	SDG&E FIELD SAFETY	882	971	1,038
Tashonda Taylor	2100-0284	DIR LABOR & BUSINESS PARTNER	1,055	1,258	1,344
Tashonda Taylor	2100-3414	Safety Compliance	571	601.20	642
Tashonda Taylor	2100-3505	EMP CARE SERVICES - SDGE	768	767	820
Tashonda Taylor	2100-3506	Employee Assistance Program (EAP) and Wellness Programs	264	294	314
Tashonda Taylor	2100-3833	BUSINESS PARTNER SOUTH	407	407	435
Tashonda Taylor	2100-3834	Manager Analysis & Workforce Planning	173	308	329
		Total	4,120	4,606	4,921
		Total SS	21,788	25,205	26,929
		Total A&G Combined	<u>\$ 373,286</u>	<u>\$ 541,787</u>	<u>\$ 552,088</u>

Table KN-42
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
A&G ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Sandra K. Hrna	1AG001	Oper CCTR-NSS-Controllers -Png & Reg Accts	2,986	3,074	3,341
Sandra K. Hrna	1AG002	Oper CCTR-NSS-Controllers -Fin Sys & Bus Controls	343	352	383
Sandra K. Hrna	1AG003	Oper CCTR-NSS-Controllers -Cost Accounting	1,515	1,491	1,619
Sandra K. Hrna	1AG004	Oper CCTR-NSS-Controllers -Sundry Billing	518	629	684
Sandra K. Hrna	1AG005	Oper CCTR-NSS-Controllers -MARP	140	160	173
Sandra K. Hrna	1AG006	Oper CCTR-NSS-Legal -Legal	6,605	6,584	7,148
Sandra K. Hrna	1AG007	Oper CCTR-NSS-Legal -Claims	511	682	741
Sandra K. Hrna	1AG008	Oper CCTR-NSS-Legal -Claims Payments and Recovery Costs	4,963	2,834	3,017
Sandra K. Hrna	1AG009	Oper CCTR-NSS-Regulatory Affairs -SDG&E Tariff	791	47,657	47,724
Sandra K. Hrna	1AG012	Oper CCTR-NSS-Use for Acctg Closing -Community Relations	29	23	25
Sandra K. Hrna	1AG014	Other 925 Damages	-	-	-
		Total	<u>18,400</u>	<u>63,487</u>	<u>64,855</u>
Debbie S. Robinson	1PB000	HEALTH BENEFITS-MEDICAL	52,262	64,656	64,656
Debbie S. Robinson	1CP000	COMPENSATION - VARIABLE PAY (GRC USE ONLY)	57,077	58,934	63,476
		Total	<u>109,339</u>	<u>123,590</u>	<u>128,132</u>
Tashonda Taylor	1HR000	Chief HR and Chief Administrative Officer	389	450	487
Tashonda Taylor	1HR001	Safety Wellness and Disability Svcs	817	1,276	1,370
Tashonda Taylor	1HR002	Long-Term Disability (LTD)	3,079	4,385	4,385
Tashonda Taylor	1HR003	Diversity and Workforce Management	1,632	1,528	1,645
Tashonda Taylor	1HR004	Organizational Effectiveness	1,361	1,639	1,771
Tashonda Taylor	1HR005	Employee Communications	255	255	275
Tashonda Taylor	1HR007	HR Diversity	113	132	142
Tashonda Taylor	1HR008	Offices of the President and COO	2,090	1,803	1,936
		Total	<u>9,734</u>	<u>11,468</u>	<u>12,012</u>
Debbie S. Robinson	1PN000	EMPLOYEE PENSION	1,775	49,246	49,246
		Total	<u>1,775</u>	<u>49,246</u>	<u>49,246</u>
Mia L. DeMontigny	1SE000	SECC OUTSIDE SERVICES EMPLOYES - F923.1	44,578	46,029	46,029
		Total	<u>44,578</u>	<u>46,029</u>	<u>46,029</u>
Neil K. Cayabyab	1SN000	SECC PROPERTY INSURANCE NON-NUCLEAR - 924.0	99,960	118,291	118,291
		Total	<u>99,960</u>	<u>118,291</u>	<u>118,291</u>
		Total NSS	<u>283,785</u>	<u>412,111</u>	<u>418,565</u>

Table KN-42
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
A&G ELECTRIC DEPARTMENT
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Sandra K. Hrna	2100-0006	Oper CCTR-USS-Regulatory Affairs -GRC & Rev Req	-	-	-
Sandra K. Hrna	2100-0274	Oper CCTR-USS-Controllers -AFFIL BILLING & COSTING	328	359	384
Sandra K. Hrna	2100-0657	Oper CCTR-USS-Controllers -VP	12	90	97
Sandra K. Hrna	2100-3050	Oper CCTR-USS-Controllers -UTILITY ACCTG DIR & STAFF	203	221	236
Sandra K. Hrna	2100-3051	Oper CCTR-USS-Controllers -FINANCIAL ACCOUNTING	680	684	731
Sandra K. Hrna	2100-3052	Oper CCTR-USS-Controllers -REGULATORY REPORTING	553	604	645
Sandra K. Hrna	2100-3058	Oper CCTR-USS-Controllers -ACCOUNTS PAYABLE	963	817	873
Sandra K. Hrna	2100-3067	Oper CCTR-USS-Controllers -IT BUSINESS PLNG & BUDGETS	608	562	600
Sandra K. Hrna	2100-3162	Oper CCTR-USS-Regulatory Affairs -VP	935	863	922
Sandra K. Hrna	2100-3427	Oper CCTR-USS-Regulatory Affairs - Case Management	1,483	1,677	1,792
Sandra K. Hrna	2100-3430	Oper CCTR-USS-Regulatory Affairs -GRC & Reg Case Support	326	355	379
Sandra K. Hrna	2100-3555	Oper CCTR-USS-Controllers -BUSINESS CONTROLS	367	560	598
Sandra K. Hrna	2100-3602	Oper CCTR-USS-Regulatory Affairs -GRC Data Analysis	524	583	623
Sandra K. Hrna	2100-3716	Oper CCTR-USS-Regulatory Affairs Rates & Demand Analysis	87	84	90
Sandra K. Hrna	2100-3791	Oper CCTR-USS-Extrnl&State Legis Affrs-VP	764	606	648
Sandra K. Hrna	2100-3798	Oper CCTR-USS-Controllers -BANK REC & ESCHEATMENT	367	363	388
Sandra K. Hrna	2100-3808	Oper CCTR-USS-Regulatory Affairs CPUC/FERC Gas Cases	96	96	102
Sandra K. Hrna	2100-4006	Oper CCTR-USS-Extrnl&State Legis Affrs-Reg Policy & Leg Analysis	136	237	254
Sandra K. Hrna	2100-4008	Oper CCTR-USS-Extrnl&State Legis Affrs-Media Relations	723	733	783
Sandra K. Hrna	2100-4009	Oper CCTR-USS-Extrnl&State Legis Affrs-Community Relations	803	772	825
Sandra K. Hrna	2100-7100	Compliance and Financial Systems Director	194	223	238
		Total	10,152	10,490	11,207
Diana L. Day	2100-3590	Risk Management	2,000	2,907	3,106
Diana L. Day	2100-3934	VP ENTERPRISE RISK MANAGEMENT	300	325	347
Diana L. Day	2100-3945	OPERATIONS RISK MANAGEMENT SDG&E	924	1,847	1,973
		Total	3,224	5,078	5,425
Tashonda Taylor	2100-0214	SDG&E FIELD SAFETY	664	731	781
Tashonda Taylor	2100-0284	DIR LABOR & BUSINESS PARTNER	794	947	1,012
Tashonda Taylor	2100-3414	Safety Compliance	430	453	484
Tashonda Taylor	2100-3505	EMP CARE SERVICES - SDGE	578	578	617
Tashonda Taylor	2100-3506	Employee Assistance Program (EAP) and Wellness Programs	199	221	236
Tashonda Taylor	2100-3833	BUSINESS PARTNER SOUTH	306	307	328
Tashonda Taylor	2100-3834	Manager Analysis & Workforce Planning	130	232	248
		Total	3,102	3,468	3,705
		Total SS	16,478	19,036	20,338
		Total A&G Electric Department	\$ 300,263	\$ 431,146	\$ 438,902

Table KN-43
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
A&G ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Sandra K. Hrna	1AG001	Oper CCTR-NSS-Controllers -Png & Reg Accts	2,807	2,891	3,141
Sandra K. Hrna	1AG002	Oper CCTR-NSS-Controllers -Fin Sys & Bus Controls	322	331	360
Sandra K. Hrna	1AG003	Oper CCTR-NSS-Controllers -Cost Accounting	1,424	1,402	1,522
Sandra K. Hrna	1AG004	Oper CCTR-NSS-Controllers -Sundry Billing	487	591	643
Sandra K. Hrna	1AG005	Oper CCTR-NSS-Controllers -MARP	132	150	163
Sandra K. Hrna	1AG006	Oper CCTR-NSS-Legal -Legal	6,210	6,191	6,721
Sandra K. Hrna	1AG007	Oper CCTR-NSS-Legal -Claims	480	641	697
Sandra K. Hrna	1AG008	Oper CCTR-NSS-Legal -Claims Payments and Recovery Costs	4,666	2,664	2,837
Sandra K. Hrna	1AG009	Oper CCTR-NSS-Regulatory Affairs -SDG&E Tariff	743	44,809	44,872
Sandra K. Hrna	1AG012	Oper CCTR-NSS-Use for Acctg Closing -Community Relations	28	22	23
Sandra K. Hrna	1AG014	Other 925 Damages	-	-	-
		Total	<u>17,300</u>	<u>59,693</u>	<u>60,980</u>
Debbie S. Robinson	1PB000	HEALTH BENEFITS-MEDICAL	49,139	60,792	60,792
Debbie S. Robinson	1CP000	COMPENSATION - VARIABLE PAY (GRC USE ONLY)	53,648	55,343	59,613
		Total	<u>102,787</u>	<u>116,135</u>	<u>120,405</u>
Tashonda Taylor	1HR000	Chief HR and Chief Administrative Officer	365	423	457
Tashonda Taylor	1HR001	Safety Wellness and Disability Svcs	768	1,199	1,288
Tashonda Taylor	1HR002	Long-Term Disability (LTD)	2,895	4,123	4,123
Tashonda Taylor	1HR003	Diversity and Workforce Management	1,543	1,444	1,555
Tashonda Taylor	1HR004	Organizational Effectiveness	1,279	1,541	1,665
Tashonda Taylor	1HR005	Employee Communications	239	239	259
Tashonda Taylor	1HR007	HR Diversity	106	124	134
Tashonda Taylor	1HR008	Offices of the President and COO	1,965	1,696	1,821
		Total	<u>9,161</u>	<u>10,790</u>	<u>11,302</u>
Debbie S. Robinson	1PN000	EMPLOYEE PENSION	1,669	46,303	46,303
		Total	<u>1,669</u>	<u>46,303</u>	<u>46,303</u>
Mia L. DeMontigny	1SE000	SECC OUTSIDE SERVICES EMPLOYES - F923.1	41,914	43,278	43,278
		Total	<u>41,914</u>	<u>43,278</u>	<u>43,278</u>
Neil K. Cayabyab	1SN000	SECC PROPERTY INSURANCE NON-NUCLEAR - 924.0	93,879	111,027	111,027
		Total	<u>93,879</u>	<u>111,027</u>	<u>111,027</u>
		Total NSS	<u>266,709</u>	<u>387,227</u>	<u>393,296</u>

Table KN-43
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
A&G ELECTRIC DISTRIBUTION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
Sandra K. Hrna	2100-0006	Oper CCTR-USS-Regulatory Affairs -GRC & Rev Req	-	-	-
Sandra K. Hrna	2100-0274	Oper CCTR-USS-Controllers -AFFIL BILLING & COSTING	309	338	361
Sandra K. Hrna	2100-0657	Oper CCTR-USS-Controllers -VP	11	85	91
Sandra K. Hrna	2100-3050	Oper CCTR-USS-Controllers -UTILITY ACCTG DIR & STAFF	190	208	222
Sandra K. Hrna	2100-3051	Oper CCTR-USS-Controllers -FINANCIAL ACCOUNTING	639	643	687
Sandra K. Hrna	2100-3052	Oper CCTR-USS-Controllers -REGULATORY REPORTING	520	568	607
Sandra K. Hrna	2100-3058	Oper CCTR-USS-Controllers -ACCOUNTS PAYABLE	906	769	821
Sandra K. Hrna	2100-3067	Oper CCTR-USS-Controllers -IT BUSINESS PLNG & BUDGETS	571	528	564
Sandra K. Hrna	2100-3162	Oper CCTR-USS-Regulatory Affairs -VP	879	811	867
Sandra K. Hrna	2100-3427	Oper CCTR-USS-Regulatory Affairs - Case Management	1,395	1,577	1,685
Sandra K. Hrna	2100-3430	Oper CCTR-USS-Regulatory Affairs -GRC & Reg Case Support	307	335	358
Sandra K. Hrna	2100-3555	Oper CCTR-USS-Controllers -BUSINESS CONTROLS	345	527	563
Sandra K. Hrna	2100-3602	Oper CCTR-USS-Regulatory Affairs -GRC Data Analysis	493	548	585
Sandra K. Hrna	2100-3716	Oper CCTR-USS-Regulatory Affairs Rates & Demand Analysis	82	79	85
Sandra K. Hrna	2100-3791	Oper CCTR-USS-Extrnl&State Legis Affrs-VP	750	595	636
Sandra K. Hrna	2100-3798	Oper CCTR-USS-Controllers -BANK REC & ESCHEATMENT	346	342	365
Sandra K. Hrna	2100-3808	Oper CCTR-USS-Regulatory Affairs CPUC/FERC Gas Cases	90	90	96
Sandra K. Hrna	2100-4006	Oper CCTR-USS-Extrnl&State Legis Affrs-Reg Policy & Leg Analysis	127	223	239
Sandra K. Hrna	2100-4008	Oper CCTR-USS-Extrnl&State Legis Affrs-Media Relations	680	689	736
Sandra K. Hrna	2100-4009	Oper CCTR-USS-Extrnl&State Legis Affrs-Community Relations	755	726	775
Sandra K. Hrna	2100-7100	Compliance and Financial Systems Director	183	209	224
		Total	9,578	9,889	10,566
Diana L. Day	2100-3590	Risk Management	1,880	2,733	2,920
Diana L. Day	2100-3934	VP ENTERPRISE RISK MANAGEMENT	282	305	326
Diana L. Day	2100-3945	OPERATIONS RISK MANAGEMENT SDG&E	869	1,736	1,855
		Total	3,031	4,774	5,101
Tashonda Taylor	2100-0214	SDG&E FIELD SAFETY	624	688	735
Tashonda Taylor	2100-0284	DIR LABOR & BUSINESS PARTNER	747	890	951
Tashonda Taylor	2100-3414	Safety Compliance	404	426	455
Tashonda Taylor	2100-3505	EMP CARE SERVICES - SDGE	544	543	580
Tashonda Taylor	2100-3506	Employee Assistance Program (EAP) and Wellness Programs	187	208	222
Tashonda Taylor	2100-3833	BUSINESS PARTNER SOUTH	288	288	308
Tashonda Taylor	2100-3834	Manager Analysis & Workforce Planning	122	218	233
		Total	2,917	3,261	3,484
		Total SS	15,526	17,925	19,151
		Total A&G Electric Distribution	\$ 282,235	\$ 405,151	\$ 412,446

Table KN-44
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
A&G GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Sandra K. Hrna	1AG001	Oper CCTR-NSS-Controllers -Png & Reg Accts	178	184	200
Sandra K. Hrna	1AG002	Oper CCTR-NSS-Controllers -Fin Sys & Bus Controls	20	21	23
Sandra K. Hrna	1AG003	Oper CCTR-NSS-Controllers -Cost Accounting	91	89	97
Sandra K. Hrna	1AG004	Oper CCTR-NSS-Controllers -Sundry Billing	31	38	41
Sandra K. Hrna	1AG005	Oper CCTR-NSS-Controllers -MARP	8	10	10
Sandra K. Hrna	1AG006	Oper CCTR-NSS-Legal -Legal	395	393	427
Sandra K. Hrna	1AG007	Oper CCTR-NSS-Legal -Claims	31	41	44
Sandra K. Hrna	1AG008	Oper CCTR-NSS-Legal -Claims Payments and Recovery Costs	297	169	180
Sandra K. Hrna	1AG009	Oper CCTR-NSS-Regulatory Affairs -SDG&E Tariff	47	2,848	2,852
Sandra K. Hrna	1AG012	Oper CCTR-NSS-Use for Acctg Closing -Community Relations	2	1	1
Sandra K. Hrna	1AG014	Other 925 Damages	-	-	-
		Total	1,100	3,794	3,876
Debbie S. Robinson	1PB000	HEALTH BENEFITS-MEDICAL	3,123	3,864	3,864
Debbie S. Robinson	1CP000	COMPENSATION - VARIABLE PAY (GRC USE ONLY)	3,429	3,591	3,863
		Total	6,552	7,455	7,727
Tashonda Taylor	1HR000	Chief HR and Chief Administrative Officer	23	27	29
Tashonda Taylor	1HR001	Safety Wellness and Disability Svcs	49	76	82
Tashonda Taylor	1HR002	Long-Term Disability (LTD)	184	262	262
Tashonda Taylor	1HR003	Diversity and Workforce Management	89	83	90
Tashonda Taylor	1HR004	Organizational Effectiveness	81	98	106
Tashonda Taylor	1HR005	Employee Communications	15	15	16
Tashonda Taylor	1HR007	HR Diversity	7	8	8
Tashonda Taylor	1HR008	Offices of the President and COO	125	108	116
		Total	573	677	709
Debbie S. Robinson	1PN000	EMPLOYEE PENSION	106	2,943	2,943
		Total	106	2,943	2,943
Mia L. DeMontigny	1SE000	SECC OUTSIDE SERVICES EMPLOYES - F923.1	2,664	2,751	2,751
		Total	2,664	2,751	2,751
Neil K. Cayabyab	1SN000	SECC PROPERTY INSURANCE NON-NUCLEAR - 924.0	6,081	7,264	7,264
		Total	6,081	7,264	7,264
		Total NSS	17,076	24,884	25,269

Table KN-44
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
A&G GENERATION
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Sandra K. Hrna	2100-0006	Oper CCTR-USS-Regulatory Affairs -GRC & Rev Req	-	-	-
Sandra K. Hrna	2100-0274	Oper CCTR-USS-Controllers -AFFIL BILLING & COSTING	20	21	23
Sandra K. Hrna	2100-0657	Oper CCTR-USS-Controllers -VP	1	5	6
Sandra K. Hrna	2100-3050	Oper CCTR-USS-Controllers -UTILITY ACCTG DIR & STAFF	12	13	14
Sandra K. Hrna	2100-3051	Oper CCTR-USS-Controllers -FINANCIAL ACCOUNTING	41	41	44
Sandra K. Hrna	2100-3052	Oper CCTR-USS-Controllers -REGULATORY REPORTING	33	36	39
Sandra K. Hrna	2100-3058	Oper CCTR-USS-Controllers -ACCOUNTS PAYABLE	58	49	52
Sandra K. Hrna	2100-3067	Oper CCTR-USS-Controllers -IT BUSINESS PLNG & BUDGETS	36	34	36
Sandra K. Hrna	2100-3162	Oper CCTR-USS-Regulatory Affairs -VP	56	52	55
Sandra K. Hrna	2100-3427	Oper CCTR-USS-Regulatory Affairs - Case Management	89	100	107
Sandra K. Hrna	2100-3430	Oper CCTR-USS-Regulatory Affairs -GRC & Reg Case Support	18	20	21
Sandra K. Hrna	2100-3555	Oper CCTR-USS-Controllers -BUSINESS CONTROLS	22	33	36
Sandra K. Hrna	2100-3602	Oper CCTR-USS-Regulatory Affairs -GRC Data Analysis	31	35	37
Sandra K. Hrna	2100-3716	Oper CCTR-USS-Regulatory Affairs Rates & Demand Analysis	5	5	5
Sandra K. Hrna	2100-3791	Oper CCTR-USS-Extrnl&State Legis Affrs-VP	14	11	12
Sandra K. Hrna	2100-3798	Oper CCTR-USS-Controllers -BANK REC & ESCHEATMENT	22	22	23
Sandra K. Hrna	2100-3808	Oper CCTR-USS-Regulatory Affairs CPUC/FERC Gas Cases	6	6	6
Sandra K. Hrna	2100-4006	Oper CCTR-USS-Extrnl&State Legis Affrs-Reg Policy & Leg Analysis	8	14	15
Sandra K. Hrna	2100-4008	Oper CCTR-USS-Extrnl&State Legis Affrs-Media Relations	43	44	47
Sandra K. Hrna	2100-4009	Oper CCTR-USS-Extrnl&State Legis Affrs-Community Relations	48	46	49
Sandra K. Hrna	2100-7100	Compliance and Financial Systems Director	12	13	14
Total			574	600	641
Diana L. Day	2100-3590	Risk Management	120	174	186
Diana L. Day	2100-3934	VP ENTERPRISE RISK MANAGEMENT	18	19	21
Diana L. Day	2100-3945	OPERATIONS RISK MANAGEMENT SDG&E	55	110	118
Total			193	303	324
Tashonda Taylor	2100-0214	SDG&E FIELD SAFETY	40	44	47
Tashonda Taylor	2100-0284	DIR LABOR & BUSINESS PARTNER	47	57	60
Tashonda Taylor	2100-3414	Safety Compliance	26	27	29
Tashonda Taylor	2100-3505	EMP CARE SERVICES - SDGE	35	35	37
Tashonda Taylor	2100-3506	Employee Assistance Program (EAP) and Wellness Programs	12	13	14
Tashonda Taylor	2100-3833	BUSINESS PARTNER SOUTH	18	18	20
Tashonda Taylor	2100-3834	Manager Analysis & Workforce Planning	8	14	15
Total			185	207	221
Total SS			952	1,111	1,187
Total A&G Generation			<u>\$ 18,027</u>	<u>\$ 25,995</u>	<u>\$ 26,456</u>

Table KN-45
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
A&G GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Sandra K. Hrna	1AG001	Oper CCTR-NSS-Controllers -Plng & Reg Accts	979	1,009	1,096
Sandra K. Hrna	1AG002	Oper CCTR-NSS-Controllers -Fin Sys & Bus Controls	112	116	126
Sandra K. Hrna	1AG003	Oper CCTR-NSS-Controllers -Cost Accounting	497	489	531
Sandra K. Hrna	1AG004	Oper CCTR-NSS-Controllers -Sundry Billing	170	206	224
Sandra K. Hrna	1AG005	Oper CCTR-NSS-Controllers -MARP	46	52	57
Sandra K. Hrna	1AG006	Oper CCTR-NSS-Legal -Legal	2,166	2,160	2,345
Sandra K. Hrna	1AG007	Oper CCTR-NSS-Legal -Claims	167	224	243
Sandra K. Hrna	1AG008	Oper CCTR-NSS-Legal -Claims Payments and Recovery Costs	1,628	929	990
Sandra K. Hrna	1AG009	Oper CCTR-NSS-Regulatory Affairs -SDG&E Tariff	259	15,633	15,654
Sandra K. Hrna	1AG012	Oper CCTR-NSS-Use for Acctg Closing -Community Relations	10	8	8
Sandra K. Hrna	1AG014	Other 925 Damages	-	-	-
		Total	<u>6,035</u>	<u>20,825</u>	<u>21,274</u>
Debbie S. Robinson	1PB000	HEALTH BENEFITS-MEDICAL	17,143	21,209	21,209
Debbie S. Robinson	1CP000	COMPENSATION - VARIABLE PAY (GRC USE ONLY)	18,781	19,488	20,987
		Total	<u>35,924</u>	<u>40,697</u>	<u>42,196</u>
Tashonda Taylor	1HR000	Chief HR and Chief Administrative Officer	127	147	160
Tashonda Taylor	1HR001	Safety Wellness and Disability Svcs	268	418	449
Tashonda Taylor	1HR002	Long-Term Disability (LTD)	1,010	1,439	1,439
Tashonda Taylor	1HR003	Diversity and Workforce Management	489	458	493
Tashonda Taylor	1HR004	Organizational Effectiveness	446	538	581
Tashonda Taylor	1HR005	Employee Communications	83	83	90
Tashonda Taylor	1HR007	HR Diversity	37	43	47
Tashonda Taylor	1HR008	Offices of the President and COO	685	592	635
		Total	<u>3,147</u>	<u>3,718</u>	<u>3,894</u>
Debbie S. Robinson	1PN000	EMPLOYEE PENSION	582	16,154	16,154
		Total	<u>582</u>	<u>16,154</u>	<u>16,154</u>
Mia L. DeMontigny	1SE000	SECC OUTSIDE SERVICES EMPLOYES - F923.1	14,622	15,098	15,098
		Total	<u>14,622</u>	<u>15,098</u>	<u>15,098</u>
Neil K. Cayabyab	1SN000	SECC PROPERTY INSURANCE NON-NUCLEAR - 924.0	7,402	7,979	7,979
		Total	<u>7,402</u>	<u>7,979</u>	<u>7,979</u>
		Total NSS	<u>67,713</u>	<u>104,471</u>	<u>106,594</u>

Table KN-45
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
A&G GAS
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016	2019	2019
			Adjusted-Recorded (2016\$)	Estimated (2016\$)	Estimated (2019\$)
Sandra K. Hrna	2100-0006	Oper CCTR-USS-Regulatory Affairs -GRC & Rev Req	-	-	-
Sandra K. Hrna	2100-0274	Oper CCTR-USS-Controllers -AFFIL BILLING & COSTING	108	118	126
Sandra K. Hrna	2100-0657	Oper CCTR-USS-Controllers -VP	4	30	32
Sandra K. Hrna	2100-3050	Oper CCTR-USS-Controllers -UTILITY ACCTG DIR & STAFF	66	72	77
Sandra K. Hrna	2100-3051	Oper CCTR-USS-Controllers -FINANCIAL ACCOUNTING	223	224	240
Sandra K. Hrna	2100-3052	Oper CCTR-USS-Controllers -REGULATORY REPORTING	182	198	212
Sandra K. Hrna	2100-3058	Oper CCTR-USS-Controllers -ACCOUNTS PAYABLE	316	268	286
Sandra K. Hrna	2100-3067	Oper CCTR-USS-Controllers -IT BUSINESS PLNG & BUDGETS	199	184	197
Sandra K. Hrna	2100-3162	Oper CCTR-USS-Regulatory Affairs -VP	307	283	302
Sandra K. Hrna	2100-3427	Oper CCTR-USS-Regulatory Affairs - Case Management	487	550	588
Sandra K. Hrna	2100-3430	Oper CCTR-USS-Regulatory Affairs -GRC & Reg Case Support	110	120	129
Sandra K. Hrna	2100-3555	Oper CCTR-USS-Controllers -BUSINESS CONTROLS	120	184	196
Sandra K. Hrna	2100-3602	Oper CCTR-USS-Regulatory Affairs -GRC Data Analysis	172	191	204
Sandra K. Hrna	2100-3716	Oper CCTR-USS-Regulatory Affairs Rates & Demand Analysis	29	28	30
Sandra K. Hrna	2100-3791	Oper CCTR-USS-Extrnl&State Legis Affrs-VP	152	121	129
Sandra K. Hrna	2100-3798	Oper CCTR-USS-Controllers -BANK REC & ESCHEATMENT	121	119	127
Sandra K. Hrna	2100-3808	Oper CCTR-USS-Regulatory Affairs CPUC/FERC Gas Cases	31	31	34
Sandra K. Hrna	2100-4006	Oper CCTR-USS-Extrnl&State Legis Affrs-Reg Policy & Leg Analysis	44	78	83
Sandra K. Hrna	2100-4008	Oper CCTR-USS-Extrnl&State Legis Affrs-Media Relations	237	240	257
Sandra K. Hrna	2100-4009	Oper CCTR-USS-Extrnl&State Legis Affrs-Community Relations	263	253	270
Sandra K. Hrna	2100-7100	Compliance and Financial Systems Director	64	73	78
		Total	3,235	3,366	3,597
Diana L. Day	2100-3590	Risk Management	656	953	1,019
Diana L. Day	2100-3934	VP ENTERPRISE RISK MANAGEMENT	98	106	114
Diana L. Day	2100-3945	OPERATIONS RISK MANAGEMENT SDG&E	303	606	647
		Total	1,057	1,666	1,780
Tashonda Taylor	2100-0214	SDG&E FIELD SAFETY	218	240	256
Tashonda Taylor	2100-0284	DIR LABOR & BUSINESS PARTNER	261	311	332
Tashonda Taylor	2100-3414	Safety Compliance	141	148	159
Tashonda Taylor	2100-3505	EMP CARE SERVICES - SDGE	190	189	202
Tashonda Taylor	2100-3506	Employee Assistance Program (EAP) and Wellness Programs	65	72	77
Tashonda Taylor	2100-3833	BUSINESS PARTNER SOUTH	101	101	107
Tashonda Taylor	2100-3834	Manager Analysis & Workforce Planning	43	76	81
		Total	1,018	1,138	1,215
		Total SS	5,310	6,170	6,592
		Total A&G Gas	\$ 73,023	\$ 110,641	\$ 113,186

Table KN-46
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
Pipeline Safety Enhancement Program
(Thousands of Dollars)

Witness Name	Workpaper Group No.	Description	2016 Adjusted-Recorded (2016\$)	2019 Estimated (2016\$)	2019 Estimated (2019\$)
Richard D. Phillips	1PS000	PIPELINE SAFETY ENHANCEMENT PROGRAM -	708	-	-
		Total	708	-	-
		Total NSS	708	-	-
		Total	-	-	-
		Total SS	-	-	-
		Total PSEP	\$ 708	\$ -	\$ -

Table KN-47
 SAN DIEGO GAS & ELECTRIC COMPANY
 TEST YEAR 2019
 WORKING CASH ADJUSTMENT TO RATE BASE (NET WORKING CASH REQUIREMENT)
 (Thousands of Dollars)

Line No.	Description	2016 Recorded												2019 Proposed											
		Total Expenses	Average No. of Days Lag	Dollar-Days Lag	Electric %	Gen %	Gas %	Electric Expenses	Gen Expenses	Gas Expenses	Electric Dollar-Days Lag	Gen Days Lag	Gas Dollar-Days Lag	Electric Expenses	Electric Average No. of Days Lag	Electric Dollar-Days Lag	Gen Expenses	Gen Average No. of Days Lag	Gen Dollar-Days Lag	Gas Expenses	Gas Average No. of Days Lag	Gas Dollar-Days Lag			
		(1)	(2)	(3)=(1)*(2)	(4)	(5)	(6)	(1) * (4)	(1) * (5)	(1) * (6)	(3) * (4)	(3) * (5)	(3) * (6)		(1)	(2)		(3)	(4)	(5)		(6)	(7)	(8)	
1	Commodities - Electric	1,126,484	42.08	47,398,772	100%				1,126,484			47,398,772													
2	Commodities - Gas	114,482	36.87	4,220,839		100%				114,482			4,220,839												
3	Commodities - Generation	154,426	36.98	5,710,181				154,426				5,710,181								111,584	36.98	4,126,014	161,329	36.87	5,948,008
4	Payroll Expense	329,196	13.02	4,286,844	58%	5%	25%	189,953	14,814	81,311	2,473,595	192,908	1,058,851												
5	F. I. C. A	22,477	12.38	278,366	58%	5%	25%	12,970	1,011	5,552	160,623	12,526	68,756												
6	Federal/State Unemployment Insurance	800	76.05	60,835	58%	5%	25%	462	36	198	35,103	2,738	15,026												
7	Incentive Compensation Plan	33,639	257.50	8,661,995	58%	5%	25%	19,410	1,514	8,309	4,998,145	389,790	2,139,513												
8	Employee Benefits	88,780	8.24	731,552	58%	5%	25%	51,228	3,995	21,929	422,120	32,920	180,693												
9	Goods & Services	647,909	34.66	22,456,803	58%	5%	25%	373,856	29,156	160,033	12,958,024	1,010,556	5,546,830												
10	Corporate Charges	174,934	12.40	2,169,869	58%	5%	25%	100,940	7,872	43,209	1,252,058	97,644	535,958												
11	Real Estate Rental	30,217	(11.74)	(354,848)	58%	5%	25%	17,436	1,360	7,464	(204,754)	(15,968)	(87,647)												
12	Materials Issued from Stores	10,006	0.00	0	33%	1%	9%	3,316	120	901	0	0	0												
13	Property/Ad Valorem/Franchise Taxes	289,421	86.24	24,959,741	58%	5%	25%	167,002	13,024	71,487	14,402,270	1,123,188	6,165,056												
14	Federal Income Taxes - Current	82,600	(86.38)	(7,134,900)	47.662	3.717	20.402	47,662	3,717	20,402	(4,116,980)	(321,071)	(1,762,320)												
15	State Income Taxes - Current	54,313	(115.04)	(6,247,975)	31.339	2.444	13.415	31,339	2,444	13,415	(3,605,206)	(281,159)	(1,543,250)												
16	Income Taxes Deferred	(39,975)	0.00	0	(21,677)	(5,096)	(13,202)	(21,677)	(5,096)	(13,202)	0	0	0												
17	Depreciation Provision	608,257	0.00	0	321,511	44,489	59,728	321,511	44,489	59,728	0	0	0												
18	Amortization of Insurance Premiums	97,096	0.00	0	56,026	4,369	23,983	56,026	4,369	23,983	0	0	0												
19	Miscellaneous Expenses	0	0.00	0	0	0	0	0	0	0	0	0	0												
20	Sub-total	2,429,669	20.52	49,868,282				1,371,433	122,825	504,718	28,774,996	2,244,073	12,317,466	1,417,869	20.98	29,749,284	209,491	18.27	3,827,498	416,219	24.40	10,157,676			
21	Total Expenses Incl. Commodities	3,825,061		107,198,074				2,497,917	277,252	619,200	76,173,768		16,538,305	2,554,678	30.37	77,582,519	321,075	24.77	7,953,513	577,547	27.89	16,105,684			
22	Revenue Lag Days										42.81	42.81	42.81											42.81	
23	Expense Lag Days (Line 18, Dollar-Days Lag / Expenses)										30.49	0.00	26.71											27.89	
24	Excess Lag Days (Line 19 - Line 20)										12.31	42.81	16.10											14.92	
25	Total Expenses Incl. Commodities (Line 18 Expenses)										2,497,917	277,252	619,200											577,547	
26	Lead/Lag Working Capital (Line 21 * Line 22 / 365)										84,269	32,517	27,312											23,612	
27	Operational Cash Requirement										63,395	4,918	19,260											20,578	
28	Working Capital Not Supplied by Investors										(36,819)	0	(15,760)											(16,838)	
29	Working Cash Adjustment to Rate Base (Line 23 to Line 25)										110,845	37,435	30,812											27,352	

Table KN-48
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

ATTACHMENT C

Workpaper to Update Testimony of CS-F

SoCalGas CS-F MSA Inspection Program

SCG-18-WP-R - 2FC005 CS - Field MSA Inspection Program,
Supplemental Workpapers 1 through 6

The changes to affected wage rates are reflected in the following workpapers:

Supplemental Workpaper 1: Wage rate changes affect 2018 and TY 2019 labor
in line items A.1, A.3 and A.4

Supplemental Workpaper 2: Wage rate changes are shown in line items K.1 - K.5

Supplemental Workpaper 4: Wage rate changes are shown in line items I.1 - I.3

Supplemental Workpaper 5: Wage rate changes are shown in line items I.1 - I.2

**SUMMARY - TY 2019 ESTIMATE -
 TOTAL COST FOR MSA
 INSPECTION PROGRAM (in 2016
 \$)**

Item	Reference Workpaper	Estimated Dollar Forecast (2016 \$)			Estimated FTE Forecast			TY 2019 Estimated RAMP vs Non-RAMP Costs				
		2017	2018	TY 2019 GRC	2017	2018	TY 2019 GRC	Costs (2016 \$)		FTEs		
		E	F	G	H	I	J	RAMP ¹	NON-RAMP	RAMP	NON-RAMP	
A) LABOR												
A.1	MSA Inspection Rep (MIR) - perform MSA Inspections	SCG-18-WP-2FC005-Supplemental WP 2, Item L.4	\$ 7,626,773	\$ 9,193,881	\$ 9,039,823	135.2	140.8	138.2	\$ 9,039,823		138.2	
A.2	Field Service Assistant (FSA) -MSA Remediation	SCG-18-WP-2FC005-Supplemental WP 3, Item I.4	\$ 4,298,916	\$ 4,524,704	\$ 4,476,021	68.1	71.4	70.5		\$ 4,476,021		70.5
A.3	MSA Chronic Access Work - 2 Man Team	SCG-18-WP-2FC005-Supplemental WP 4, Item J.3	\$ 216,184	\$ 248,248	\$ 248,813	3.6	3.9	3.9	\$ 248,813		3.9	
A.4	MSA Office Rep (MORs) - Meter Access Handling -	SCG-18-WP-2FC005-Supplemental WP 5, Item J.3	\$ 1,066,773	\$ 1,304,774	\$ 1,273,480	18.6	19.2	18.7	\$ 1,273,480		18.7	
A.5	Field Supervision	SCG-18-WP-2FC005-Supplemental WP 6, Item C.3	\$ 1,386,189	\$ 1,478,490	\$ 1,480,378	16.0	17.0	17.0	\$ 1,035,896	\$ 444,482	11.90	5.1
A.6	MSA Office Clerks	SCG-18-WP-2FC005-Supplemental WP 6, Item C.1	\$ 121,181	\$ 121,647	\$ 121,802	2.0	2.0	2.0	\$ 121,802		2.0	
A.6	CSR-2 (Cust Svc Rep)	SCG-18-WP-2FC005-Supplemental WP 6, Item C.2	\$ 57,678	\$ 115,800	\$ 115,948	1.0	2.0	2.0	\$ 115,948		2.0	
A.7	Other Management Support Staff	SCG-18-WP-2FC005-Supplemental WP 6, Item C.8	\$ 653,462	\$ 760,975	\$ 761,947	7.0	8.0	8.0	\$ 761,947		8.0	
A.8	Total Labor		\$ 15,427,156	\$ 17,748,519	\$ 17,518,213	251.5	264.2	260.3	\$ 12,597,709	\$ 4,920,503	184.7	75.6
B) NON-LABOR												
B.1	Non-Labor Cost per FTE	BY 2016 data	\$ 2,318	\$ 2,318	\$ 2,318							
B.2	Total FTEs	from A.8	251.5	264.2	260.3							
B.3	Total Non-Labor	B.1 x B.2	\$ 583,032	\$ 612,446	\$ 603,475				\$ 470,138	\$ 133,337		
C)	GRAND TOTAL		\$ 16,010,188	\$ 18,360,965	\$ 18,121,688	251.5	264.2	260.3	\$ 13,067,848	\$ 5,053,840	184.7	75.6
D) AMIBA FUNDING												
D.1	AMIBA Funding	applies to 2017 & 2018 only	\$ 496,000	\$ 2,365,000		8.8	40.1					
D.2	REVISED GRAND TOTAL	C - D.1	\$ 15,514,188	\$ 15,995,965		242.7	224.1					

**SUMMARY - TY 2019 ESTIMATE -
 TOTAL COST FOR MSA
 INSPECTION PROGRAM (in 2016
 \$)**

Item	Reference Workpaper	2016 Adjusted Recorded				Comparison of BY 2016 to TY 2019 GRC (Incremental Request in TY 2019 GRC)				
		Labor O	N/Labor P	Total Q	FTE R	Labor S = G - O	N/Labor T = G - P	Total U = S + T	FTE V = J - R	
A) LABOR										
A.1	MSA Inspection Rep (MIR) - perform MSA Inspections	SCG-18-WP-2FC005- Supplemental WP 2, Item L.4	\$ 2,885,496		\$ 2,885,496	61.2	\$ 6,154,327		\$ 6,154,327	77.0
A.2	Field Service Assistant (FSA) -MSA Remediation	SCG-18-WP-2FC005- Supplemental WP 3, Item I.4	\$ 212,582		\$ 212,582	2.8	\$ 4,263,439		\$ 4,263,439	67.7
A.3	MSA Chronic Access Work - 2 Man Team	SCG-18-WP-2FC005- Supplemental WP 4, Item J.3	\$ -		\$ -	0	\$ 248,813		\$ 248,813	3.9
A.4	MSA Office Rep (MORs) - Meter Access Handling -	SCG-18-WP-2FC005- Supplemental WP 5, Item J.3	\$ 426,031		\$ 426,031	7.9	\$ 847,449		\$ 847,449	10.8
A.5	Field Supervision	SCG-18-WP-2FC005- Supplemental WP 6, Item C.3	\$ 424,860		\$ 424,860	5.1	\$ 1,055,518		\$ 1,055,518	11.9
A.6	MSA Office Clerks	SCG-18-WP-2FC005- Supplemental WP 6, Item C.1	\$ 107,129		\$ 107,129	1.7	\$ 14,673		\$ 14,673	0.3
A.6	CSR-2 Labor	SCG-18-WP-2FC005- Supplemental WP 6, Item C.2			\$ -		\$ 115,948		\$ 115,948	2.0
A.7	Other Management Support Staff	SCG-18-WP-2FC005- Supplemental WP 6, Item C.8	446206		\$ 446,206	4.9	\$ 315,741		\$ 315,741	3.1
A.8	Total Labor		\$ 4,502,304	\$ -	\$ 4,502,304	83.6	\$ 13,015,909	\$ -	\$ 13,015,909	176.7
B) NON-LABOR										
B.1	Non-Labor Cost per FTE	BY 2016 data								
B.2	Total FTEs	from A.8								
B.3	Total Non-Labor	B.1 x B.2			\$ 1,364,586			\$ (761,111)	\$ (761,111)	
C)	GRAND TOTAL		\$ 4,502,304	\$ 1,364,586	\$ 5,866,890		\$ 13,015,909	\$ (761,111)	\$ 12,254,798	176.7

Note 1: RAMP costs refer to costs associated with completing the DOT-mandated MSA inspections which includes the costs for MIRs who perform the inspections, costs for 2-man team to handle chronic meter access, MOR costs to contact customers to schedule the inspections, and costs for supervision, CSRs, MSA office clerks and other management support staff who support MSA inspection activities. RAMP non-labor costs is based on non-labor per FTE applied to total RAMP FTE labor plus costs for uniforms and boot allowance (, i.e., PPE) for the FSAs.

Calculation of Field Labor Cost for MSA Inspections - MSA Inspection Representative (MIR) Labor (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
A) Total Inspection Volume							
A.1 Annual Inspections (Standard)		2,086,486	2,160,364	2,078,797	2,086,486	2,160,364	2,108,549
A.2 CGI (Can't Get In) Rate	BY 2016 data	8.7%	8.7%	8.7%	8.7%	8.7%	
A.3 Additional Inspections work due to CGI	A.1 X A.2	181,662	188,094	180,993	181,662	188,094	183,583
A.4 Total Annual Inspections Volume	A.1 + A.3	2,268,148	2,348,458	2,259,790	2,268,148	2,348,458	2,292,132
B) Production Rate: Orders per Day per FTE							
B.1 Basic Route: Orders per day per FTE	BY 2016 data	99.9	99.9	99.9	99.9	99.9	
B.2 CGI Orders per day per FTE	Based on 2016 data + 4% increased drive time due to traffic congestion	23.7	22.9	22.3	22.3	22.3	
C) Productive Hours							
C.1 Standard Inspections: Productive Hours	A.1 / B.1 x 8 hours	167,114	173,031	166,498	167,114	173,031	168,881
C.2 CGI Inspections: Productive Hours	A.3 / B.2 x 8 hours	61,321	65,710	64,930	65,170	67,478	65,859
C.3 Total Productive Hours	C.1 + C.2	228,434	238,741	231,428	232,284	240,509	234,740
D) Training Hours							
D.1 Training to Productive Hour Ratio %	BY 2016 data	5.3%	5.3%	5.3%	5.3%	5.3%	
D.2 Training Hours	C.3 x D.1	12,107	12,653	12,266	12,311	12,747	12,441
E) Vacation & Sick (V&S) Hours							
E.1 V&S Percentage	BY 2016 V&S factor	16.92%	16.92%	16.92%	16.92%	16.92%	
E.2 V&S Hours -	(C.3 + D.2) x E.1	40,700	42,536	41,233	41,386	42,851	41,823

Calculation of Field Labor Cost for MSA Inspections - MSA Inspection Representative (MIR) Labor (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
F) Summary Total Hours: Productive/Meetings & Training/V&S							
F.1 Total Productive Hours	From C.3	228,434	238,741	231,428	232,284	240,509	234,740
F.2 Total Training Hours	From D.2	12,107	12,653	12,266	12,311	12,747	12,441
F.3 Total V&S Hours	From E.2	40,700	42,536	41,233	41,386	42,851	41,823
F.4 Total Hours	Total F.1 to F.3	281,241	293,930	284,927	285,981	296,107	289,005
To calculate costs, hours are split between District Hubs and Stand Alone Districts based on inspection data for these areas							
G) District Hubs versus Stand-Alone Districts							
Split hours between District Hubs and Stand-Alone Districts. Employees in District Hubs are paid a higher wage rate per hour							
G.1 District Hub Percentage	Based on inspection data	94%	91%	91%	94%	91%	
G.2 Stand-Alone District Percentage		6%	9%	9%	6%	9%	
District Hubs							
G.3 Hubs: Productive Hours	F.1 x G.1	215,159	216,521	209,495	218,785	218,124	215,468
G.4 Hubs: Training Hours	F.2 x G.1	11,403	11,476	11,103	11,596	11,561	11,420
G.5 Hubs: V&S Hours	F.3 x G.1	38,334	38,577	37,325	38,980	38,863	38,389
Stand Alone Districts							
G.6 Stand-Alone: Productive Hours	F.1 x G.2	13,275	22,220	21,933	13,499	22,384	19,272
G.7 Stand Alone: Training Hrs	F.2 x G.2	704	1,178	1,162	715	1,186	1,021
G.8 Stand Alone: V&S Hours	F.3 x G.2	2,365	3,959	3,908	2,405	3,988	3,434
G.9 Total Hours: District Hubs and Stand Alone Districts	Sum of G.3 to G.8	281,241	293,930	284,927	285,981	296,107	289,005

Calculation of Field Labor Cost for MSA Inspections - MSA Inspection Representative (MIR) Labor (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)	
		2017	2018	2019	2020	2021		
Split of Straight Time (ST) vs Overtime (OT) applies to productive hours only								
H.1	ST Percentage	BY 2016 data	98.8%	98.8%	98.8%	98.8%	98.8%	
H.2	OT Percentage	BY 2016 data	1.2%	1.2%	1.2%	1.2%	1.2%	
I) Total Hours: Productive/Training/V&S								
Employees in District Hubs are paid a higher wage rate per hour								
District Hubs								
I.1	District Hubs: ST Productive Hours	G.3 x H.1	212,577	213,923	206,981	216,160	215,507	212,883
I.2	District Hubs: OT Productive Hours	G.3 x H.2	2,582	2,598	2,514	2,625	2,617	2,586
I.3	District Hubs: Training Hours	From G.4	11,403	11,476	11,103	11,596	11,561	11,420
I.4	District Hubs: V&S Hours	From G.5	38,334	38,577	37,325	38,980	38,863	38,389
I.5	Total District Hub Hours	Sum of I.1 to I.4	264,897	266,574	257,924	269,361	268,548	265,277
Stand Alone Districts								
I.6	Stand Alone: ST Productive Hours	G.6 x H.1	13,116	21,953	21,670	13,337	22,116	19,041
I.7	Stand Alone: OT Productive Hours	G.6 x H.2	159	267	263	162	269	231
I.8	Stand Alone Training Hours	From G.7	704	1,178	1,162	715	1,186	1,021
I.9	Stand Alone : V&S Hours	From G.8	2,365	3,959	3,908	2,405	3,988	3,434
I.10	Total Stand Alone District Hours	Sum of I.6 to I.9	16,344	27,356	27,003	16,620	27,559	23,727
J) Total FTE: Straight Time (ST) and Overtime (OT)								
J.1	Total Paid Hours per Year		2080	2088	2088	2096	2088	
J.2	ST FTE (includes Training and V&S Hours)	(Sum of I.1, I.3, I.4, I.6, I.8, I.9) / J.1	133.9	139.4	135.1	135.1	140.4	136.9
J.3	OT FTE	(I.2 + I.7) / J.1	1.3	1.4	1.3	1.3	1.4	1.3
J.4	Total FTE	J.2 + J.3	135.2	140.8	136.5	136.4	141.8	138.2

Calculation of Field Labor Cost for MSA Inspections - MSA Inspection Representative (MIR) Labor (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
K) Wage Rates							
Employees in District Hubs are paid a higher wage rate per hour							
	2016 Blended Wage Rate						
K.1	ST Rate: District Hub MIR	\$ 27.11	\$ 31.19	\$ 31.19	\$ 31.19	\$ 31.19	
K.2	OT Rate: District Hub MIR K.1 x 1.5 hrs	\$ 40.67	\$ 46.79	\$ 46.79	\$ 46.79	\$ 46.79	
K.3	ST Rate: Stand Alone District MIR	\$ 26.36	\$ 31.19	\$ 31.19	\$ 31.19	\$ 31.19	
K.4	OT Rate: Stand Alone District MIR K.3 x 1.5 hrs	\$ 39.54	\$ 46.79	\$ 46.79	\$ 46.79	\$ 46.79	
K.5	ST Rate: Employees in Training	\$ 25.14	\$ 29.73	\$ 29.73	\$ 29.73	\$ 29.73	
L) Total Labor Costs:							
L.1	Labor: District Hubs (excl Training) (1.1 x K.1) + (1.2 x K.2) + (1.4 x K.1)	\$ 6,907,966	\$ 7,997,028	\$ 7,737,531	\$ 8,080,645	\$ 8,056,250	\$ 7,958,142
L.2	Labor: Stand Alone Districts (excl Training) (1.6 x K.3) + (1.7 x K.4) + (1.9 x K.3)	\$ 414,436	\$ 820,671	\$ 810,080	\$ 498,581	\$ 826,749	\$ 711,803
L.3	Labor Costs: Training (1.3 + 1.8) x K.5	\$ 304,371	\$ 376,182	\$ 364,659	\$ 366,008	\$ 378,967	\$ 369,878
L.4	Total Labor Costs: MSA Inspections L.1 + L.2 + L.3	\$ 7,626,773	\$ 9,193,881	\$ 8,912,269	\$ 8,945,234	\$ 9,261,965	\$ 9,039,823

Calculation of Field Labor Cost for MSA Inspection Remediation Work - Field Service Assistant (FSA) Labor (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
A) Total Inspection Volume							
A.1 Annual Inspections		2,086,486	2,160,364	2,078,797	2,086,486	2,160,364	2,108,549
A.2 2016 Annual Follow Up Rate	BY 2016 data	7.1%	7.1%	7.1%	7.1%	7.1%	
A.3 FSA MSA Inspection Follow Up Orders	A.1 x A.2	148,305	153,557	147,759	148,305	153,557	149,874
A.4 CGI (Can't Get In) Rate	BY 2016 data	11.1%	11.1%	11.1%	11.1%	11.1%	
A.5 Total CGI MSA Follow Up	A.3 x A.4	16,461	17,044	16,401	16,461	17,044	16,635
A.6 Total MSA Inspection Follow Up Orders	A.3 + A.5	164,767	170,601	164,159	164,767	170,601	166,509
B) Productive Hours							
	Based on 2016 data + 4% increased drive time due to traffic congestion						
B.1 Orders per day per FTE		11.5	11.3	11.1	11.1	11.1	
B.2 Total Productive Hours	A.6 / B.1 x 8 hrs	115,020	121,061	118,069	118,505	122,701	119,758
C) Training Hours							
C.1 Training to Productive Hour Ratio %	BY 2016 data	5.3%	5.3%	5.3%	5.3%	5.3%	
C.2 Training Hours	B.2 x D.1	6,096	6,416	6,258	6,281	6,503	6,347
D) Vacation & Sick (V&S) Hours							
D.1 V&S Percentage	BY 2016 V&S factor	16.92%	16.92%	16.92%	16.92%	16.92%	
D.2 V&S Hours	(B.2 + C.2) x D.1	20,493	21,569	21,036	21,114	21,861	21,337
E) Split of Straight Time (ST) vs Overtime (OT) applies to productive hours only							
E.1 ST Percentage	BY 2016 data	98.8%	98.8%	98.8%	98.8%	98.8%	
E.2 OT Percentage	BY 2016 data	1.2%	1.2%	1.2%	1.2%	1.2%	

Calculation of Field Labor Cost for MSA Inspection Remediation Work - Field Service Assistant (FSA) Labor (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)	
		2017	2018	2019	2020	2021		
F) Summary Total of Hours								
F.1	Productive ST Hours							
		B.2 x E.1	113,640	119,608	116,652	117,083	121,229	118,321
F.2	Productive OT Hours	B.2 x E.2	1,380	1,453	1,417	1,422	1,472	1,437
F.3	Training Hours	From C.2	6,096	6,416	6,258	6,281	6,503	6,347
F.4	V&S Hours	From D.2	20,493	21,569	21,036	21,114	21,861	21,337
F.5	Total Hours	Sum of F.1 to F.4	141,609	149,046	145,362	145,900	151,066	147,443
G) Total FTE: Straight Time (ST) and Overtime (OT)								
G.1	Total Paid Hours per Year		2080	2088	2088	2096	2088	2,091
G.2	ST FTE (incl Training and V&S Hours)	(F.1 + F.3 + F.4) / G.1	67.4	70.7	68.9	68.9	71.6	69.8
G.3	OT FTE	F.2 / G.1	0.7	0.7	0.7	0.7	0.7	0.7
G.4	Total FTE	G.2 + G.3	68.1	71.4	69.6	69.6	72.3	70.5
H) Wage Rates: Field Service Assistant (FSA)								
H.1	FSA ST Rate	2016 Blended Rate	\$ 30.23	\$ 30.23	\$ 30.23	\$ 30.23	\$ 30.23	
H.2	FSA OT Rate	H.1 x 1.5 hrs	\$ 45.35	\$ 45.35	\$ 45.35	\$ 45.35	\$ 45.35	
H.3	FSA ST Rate for Training Labor	2016 Starting Rate	\$ 29.73	\$ 29.73	\$ 29.73	\$ 29.73	\$ 29.73	
I) Total Labor Costs								
I.1	Productive ST and V&S Labor	(F.1 + F.4) x H.1	\$ 4,055,089	\$ 4,268,071	\$ 4,162,574	\$ 4,177,971	\$ 4,325,904	\$ 4,222,150
I.2	Productive OT Labor	F.2 x H.2	\$ 62,591	\$ 65,878	\$ 64,250	\$ 64,488	\$ 66,771	\$ 65,170
I.3	Training Labor	F.3 x H.3	\$ 181,236	\$ 190,754	\$ 186,039	\$ 186,728	\$ 193,339	\$ 188,702
I.4	Total Costs: MSA Insp Follow Up Orders	Sum of J.1 to J.3	\$ 4,298,916	\$ 4,524,704	\$ 4,412,864	\$ 4,429,186	\$ 4,586,014	\$ 4,476,021

Calculation of Field Labor Cost to Handle Chronic Meter Access - 2 Man Access Team (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
A) Total Inspection Volume							
A.1 Annual Inspections		2,086,486	2,160,364	2,078,797	2,086,486	2,160,364	2,108,549
A.2 Chronic Meter Access %	BY 2016 data	0.43%	0.43%	0.43%	0.43%	0.43%	
A.3 Total Chronic MSA Inspection Orders	A.1 x A.2	9,044	9,364	9,011	9,044	9,364	9,140
B) Productive (Work Time) Hours							
B.1 Orders per day per FTE	Based on 2016 data + 4% increased drive time due to traffic congestion	23.7	22.9	22.3	22.3	22.3	
B.2 Productive Hours (2 Man Access Team)	A.3 / B.1 x 8 hrs x 2 man team	6,106	6,543	6,465	6,489	6,719	6,558
C) Meetings and Training							
C.1 Meetings & Training %	BY 2016 data	5.3%	5.3%	5.3%	5.3%	5.3%	
C.2 Meeting & Training Hours	B.2 x C.1	324	347	343	344	356	670
D) V&S Factor							
D.1 V&S Percentage	BY 2016 V&S factor	16.92%	16.92%	16.92%	16.92%	16.92%	
D.2 V&S Hours	(B.2 + C.2) x D.1	1,088	1,166	1,152	1,156	1,197	2,254
E) Total Hours: Productive/Meetings & Training/V&S							
E.1 Total Productive Hours	From B.2	6,106	6,543	6,465	6,489	6,719	6,558
E.2 Total Training Hours	From C.2	324	347	343	344	356	348
E.3 Total V&S Hours	From D.2	1,088	1,166	1,152	1,156	1,197	1,168
E.4 Total Hours	Total E.1 to E.4	7,517	8,055	7,960	7,989	8,272	8,074

Calculation of Field Labor Cost to Handle Chronic Meter Access - 2 Man Access Team (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
F) Split of Straight Time (ST) vs Overtime (OT) applies to productive hours only							
F.1	ST Percentage	98.8%	98.8%	98.8%	98.8%	98.8%	
F.2	OT Percentage	1.2%	1.2%	1.2%	1.2%	1.2%	
G) Hours: Straight Time vs OT Hours							
G.1	MSA Inspection Rep: ST Hours	3,016	3,232	3,194	3,206	3,319	3,239
G.2	MSA Inspection Rep: OT Hours	37	39	39	39	40	39
G.3	MSA Inspection Rep: Training Hours	162	173	171	172	178	
G.4	MSA Inspection Rep: V&S Hours	544	583	576	578	599	
G.5	Field Svs Assistant: ST Hours	3,016	3,232	3,194	3,206	3,319	3,239
G.6	Field Svs Assistant: OT Hours	37	39	39	39	40	39
G.7	Fiels Svc Assistant: Training Hours	162	173	171	172	178	
G.8	Fiels Svc Assistant: V&S Hours	544	583	576	578	599	
G.9	Total Hours	7,517	8,055	7,960	7,989	8,272	6,558
H) Total FTE							
H.1	Total Paid Hours per Year	2080	2088	2088	2096	2088	
H.2	Straight Time FTE	3.58	3.82	3.77	3.77	3.92	3.82
H.3	Overtime FTE	0.04	0.04	0.04	0.04	0.04	0.04
H.4	Total FTE	3.61	3.86	3.81	3.81	3.96	3.86

Calculation of Field Labor Cost to Handle Chronic Meter Access - 2 Man Access Team (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)	
		2017	2018	2019	2020	2021		
I) Wage Rates: MSA Inspection Rep (MIR) and Field Service Assistant (FSA)								
I.1	MIR ST Rate	2016 Blended Rate	\$ 27.11	\$ 31.19	\$ 31.19	\$ 31.19	\$ 31.19	
I.2	MIR OT Rate	I.1 x 1.5	\$ 40.67	\$ 46.79	\$ 46.79	\$ 46.79	\$ 46.79	
I.3	MIR Rate for Training Labor	2016 Starting Rate	\$ 25.14	\$ 29.73	\$ 29.73	\$ 29.73	\$ 29.73	
I.4	FSA ST Rate	2016 Blended Rate	\$ 30.23	\$ 30.23	\$ 30.23	\$ 30.23	\$ 30.23	
I.5	FSA OT Rate	I.4 x 1.5	\$ 45.35	\$ 45.35	\$ 45.35	\$ 45.35	\$ 45.35	
I.6	FSA Rate for Training Labor	2016 Starting Rate	\$ 29.73	\$ 29.73	\$ 29.73	\$ 29.73	\$ 29.73	
J) Total Labor Costs								
J.1	Total Costs: MSA Inspection Reps	(G.1 x I.1) + (G.2 x I.2) + (G.3 x I.3) + (G.4 x I.1)	\$ 102,083	\$ 125,980	\$ 124,485	\$ 124,945	\$ 129,369	\$ 126,266
J.2	Total Costs: Field Service Assistants	(G.5 x I.4) + (G.6 x I.5) + (G.7 x I.6) + (G.8 x I.4)	\$ 114,101	\$ 122,269	\$ 120,818	\$ 121,265	\$ 125,558	\$ 122,547
J.3	Total Chronic Access Field Labor	J.1 + J.2	\$ 216,184	\$ 248,248	\$ 245,302	\$ 246,210	\$ 254,928	\$ 248,813

Calculation of Labor Cost to Handle Call Volume for Meter Access Issues - MSA Office Rep (MOR) Labor (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
A) Total Inspection Volume							
A.1	Annual MSA Inspection Volume	2,086,486	2,160,364	2,078,797	2,086,486	2,160,364	2,108,549
A.2	CGI (Can't Get In) Rate - MSA Inspections	8.7%	8.7%	8.7%	8.7%	8.7%	
	CGI Order Volume for MSA Meter Access						
A.3	Handling	181,662	188,094	180,993	181,662	188,094	183,583
A.4	Call Volume per Order	1.4	1.4	1.4	1.4	1.4	
A.5	Total Call Volume	254,327	263,332	253,390	254,327	263,332	257,016
B) Inbound vs Outbound Call Volume							
B.1	Inbound Call Volume %	49%	49%	49%	49%	49%	
B.2	Outbound Call Volume %	51%	51%	51%	51%	51%	
B.3	Inbound Call Volume	124,620	129,033	124,161	124,620	129,033	125,938
B.4	Outbound Call Volume	129,707	134,299	129,229	129,707	134,299	131,078
C) Production Rate: Orders per Day per Employee							
C.1	Inbound Avg Daily Call Volume per FTE	63	63	63	63	63	
C.2	Outbound Avg Daily Call Volume per FTE	60	60	60	60	60	
D) Total Productive Hours							
D.1	Inbound Calls: Productive Hours	15,825	16,385	15,766	15,825	16,385	15,992
D.2	Outbound Calls: Productive Hours	17,294	17,907	17,231	17,294	17,907	17,477
D.3	Total Productive Hours	33,119	34,292	32,997	33,119	34,292	33,469
E) Vacation & Sick (V&S) Hours							
E.1	V&S Percentage	16.92%	16.92%	16.92%	16.92%	16.92%	
E.2	V&S Hours	5,604	5,802	5,583	5,604	5,802	5,663

Calculation of Labor Cost to Handle Call Volume for Meter Access Issues - MSA Office Rep (MOR) Labor (in 2016 \$)

Item	Notes/Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
F) Summary Total Hours							
F.1 Total Productive Hours	From D.3	33,119	34,292	32,997	33,119	34,292	33,469
F.2 Total V&S Hours	From E.2	5,604	5,802	5,583	5,604	5,802	5,663
F.3 Total Hours	F1 + F.2	38,723	40,094	38,580	38,723	40,094	39,132
G) Total FTE							
G.1 Total Paid Hours per Year		2080	2088	2088	2096	2088	
G.2 Total FTE (incl Training and V&S Hours)	F.3 / G.1	18.62	19.20	18.48	18.47	19.20	18.72
H) Split 50/50 between MSA Office Rep Non-Bilingual and MSA Office Rep - Bilingual							
H.1 Total Hours: MSA Office Rep - Non-Bilingual	F.3 x 50%	19,361	20,047	19,290	19,361	20,047	19,566
H.2 Total Hours: MSA Office Rep - Bilingual	F.3 x 50%	19,361	20,047	19,290	19,361	20,047	19,566
I) Wage Rates: MSA Office Representative (MOR)							
I.1 MOR Non-Bilingual Wage Rate	2016 Blended Rate	\$ 27.23	\$ 32.23	\$ 32.23	\$ 32.23	\$ 32.23	
I.2 MOR Bilingual Wage Rate	2016 Blended Rate	\$ 27.86	\$ 32.86	\$ 32.86	\$ 32.86	\$ 32.86	
J) Total Estimated Costs							
J.1 Costs: MSA Office Rep Non-Bilingual	H.1 x I.1	\$ 527,288	\$ 646,072	\$ 621,679	\$ 623,979	\$ 646,072	\$ 630,577
J.2 Costs: MSA Office Rep Bilingual	H.2 x I.2	\$ 539,485	\$ 658,702	\$ 633,832	\$ 636,176	\$ 658,702	\$ 642,903
J.3 Total Labor: MSA Office Reps	J.1 + J.2	\$ 1,066,773	\$ 1,304,774	\$ 1,255,511	\$ 1,260,155	\$ 1,304,774	\$ 1,273,480

Labor for Clerical, Customer Service Reps, Field Supervision and Other Management Support Staff (in 2016 \$)

Item	Notes/ Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
A) Clerical, CSR and Management FTEs							
Clerical & CSF							
A.1	MSA Office Clerks	2.0	2.0	2.0	2.0	2.0	2.0
A.2	Customer Service Reps (CSRs)	1.0	2.0	2.0	2.0	2.0	2.0
Field Supervision (Management)							
A.3	MSA Inspection Supervisor	16.0	17.0	17.0	17.0	17.0	17.0
Other Management Support Staff							
A.4	MSA Inspection Manager	1.0	1.0	1.0	1.0	1.0	1.0
A.5	MSA Administrative Supervisor	1.0	1.0	1.0	1.0	1.0	1.0
A.6	MSA Program Analysts and Specialist	4.0	4.0	4.0	4.0	4.0	4.0
A.7	MSA Inspection Field Team Lead	1.0	2.0	2.0	2.0	2.0	2.0
A.8	Total Management	7.0	8.0	8.0	8.0	8.0	8.0
A.9	Total Management & Clerical	25.0	27.0	27.0	27.0	27.0	27.0
B) Clerical, CSR and Management Hours							
B.1	Total Paid Hours per Year	2,080	2,088	2,088	2,096	2,088	
Clerical and CSR							
B.2	MSA Office Clerks	4,160	4,176	4,176	4,192	4,176	4,181
B.3	Customer Service Reps (CSRs)	2,080	4,176	4,176	4,192	4,176	4,181
Field Supervision (Management)							
B.4	MSA Inspection Supervisor	33,280	35,496	35,496	35,632	35,496	35,541
Other Management Support Staff							
B.5	MSA Inspection Manager	2,080	2,088	2,088	2,096	2,088	2,091
B.6	MSA Administrative Supervisor	2,080	2,088	2,088	2,096	2,088	2,091
B.7	MSA Program Analysts and Specialist	8,320	8,352	8,352	8,384	8,352	8,363
B.8	MSA Inspection Field Team Lead	2,080	4,176	4,176	4,192	4,176	4,181
B.9	Total Other Management	14,560	16,704	16,704	16,768	16,704	16,725
B.12	Total Mgmt/Clerical/CSR	54,080	60,552	60,552	60,784	60,552	60,629
C) Clerical, CSR and Management Labor Cos							
	Rate						

Labor for Clerical, Customer Service Reps, Field Supervision and Other Management Support Staff (in 2016 \$)

Item	Notes/ Calculation	TY 2019 GRC Period					TY 2019 GRC Request - Average (2019 - 2021)
		2017	2018	2019	2020	2021	
Clerical and CSR							
C.1 MSA Office Clerks	\$ 29.13 B.2 x rate	\$ 121,181	\$ 121,647	\$ 121,647	\$ 122,113	\$ 121,647	\$ 121,802
C.2 Customer Service Reps (CSRs)	\$ 27.73 B.3 x rate	\$ 57,678	\$ 115,800	\$ 115,800	\$ 116,244	\$ 115,800	\$ 115,948
Field Supervision (Management)							
C.3 MSA Inspection Supervisor	\$ 41.65 B.4 x rate	\$ 1,386,189	\$ 1,478,490	\$ 1,478,490	\$ 1,484,155	\$ 1,478,490	\$ 1,480,378
Other Management Support Staff							
C.4 MSA Inspection Manager	\$ 60.82 B.5 x rate	\$ 126,513	\$ 127,000	\$ 127,000	\$ 127,487	\$ 127,000	\$ 127,162
C.5 MSA Administrative Supervisor	\$ 44.06 B.6 x rate	\$ 91,648	\$ 92,000	\$ 92,000	\$ 92,352	\$ 92,000	\$ 92,117
C.6 MSA Program Analysts and Speciali	\$ 39.75 B.7 x rate	\$ 330,703	\$ 331,975	\$ 331,975	\$ 333,247	\$ 331,975	\$ 332,399
C.7 MSA Inspection Field Team Lead	\$ 50.29 B.8 x rate	\$ 104,598	\$ 210,000	\$ 210,000	\$ 210,805	\$ 210,000	\$ 210,268
C.8 Total Other Management	Sum of C.4 - C.7	\$ 653,462	\$ 760,975	\$ 760,975	\$ 763,891	\$ 760,975	\$ 761,947
Total Labor Costs:							
C.11 Clerical, CSR and Management	C.1 + C.2 + C.3 + C.10	\$ 2,160,831	\$ 2,361,112	\$ 2,361,112	\$ 2,370,158	\$ 2,361,112	\$ 2,364,127

ATTACHMENT D

**Workpaper to Update Testimony of
Corporate Center Escalation**

Attachment D

Workpaper to Update Testimony of Mia L. DeMontigny (Corporate Escalation)

Sempra Energy Corporate Center Test Year 2019 General Rate Case Escalation Indexes - Update Testimony

Utility Cost Indexes (Set to Base Year 2016=1.0000)

Scott Wilder; data based on Global Insight 2nd Quarter 2018 utility cost forecast, released July 26, 2018.

O&M Labor Cost Index:

Shared Services Labor O&M Index

Labor			
2016	2017	2018	2019
1.0000	1.0244	1.0539	1.0869

O&M Non-Labor Cost Index:

A simple average of the following two cost indices:

JETOTALMSX_SD Electric Non-Labor O&M Index
JETOTALMSX_SD Gas Non-Labor O&M Index

Non-Labor			
2016	2017	2018	2019
1.0000	1.0146	1.0435	1.0648
1.0000	1.0190	1.0453	1.0648

Sempra Corporate Center Average

1.0168 1.0444 1.0648

ATTACHMENT E

**Workpaper to Update Testimony of
Compensation & Benefits**

ATTACHMENT E-1

ASSUMPTIONS

	Projected		
	2017	2018	2019
1. Total headcount based on initial number of employees as of December 2016 plus estimated increases or decreases each year provided by planners for their respective areas.	7,900	8,142	8,624
2. Projected adjusted non-represented headcount is as follows:	3,182	3,392	3,812
3. Projected adjusted represented headcount is as follows:	4,718	4,750	4,812
6. Participation in type and level of coverage for 2018-2019 is calculated using actual enrollment as of Jan 2018 (a2) indexed for changes in headcount. 2017 participation (a1) is calculated using Feb 1, 2017 data indexed for changes in headcount.			
7. "Annual Employer Share of Premium" (b) for 2017, 2018 and 2019 are actual rates.			
8. Retiree shift deduction is cost of the "Total ER Premium" shifted to the postretirement medical plans and calculated using percentages provided by Towers Watson. This is done because medical rates for active employees and retirees under the age of 65 are negotiated together and therefore causes active rates to be higher than they would be if negotiated separately. The projected 2017 credit is projected based on credits taken through June 2016. The 2018 credit was based on credits through July 2018 and increases in 2019 by half of the actual medical rate inflation.			

Carrier / Type	Plan Code	Coverage Type	(a) Participants						(b) Annual Employer Only Rates			(a) x (b) = Total ER Premium			
			(a1)		(a2)		(a1) * (1)		(a2) * (1)		Actual	Prelim Actual	Projected		
			Actual	% of 2/28/17	Actual	01/01/18	2017	2018	2019	2017			2018	2019	
			02/28/17	Total	01/01/18	Total	2017	2018	2019	2017	2018	2019	2017	2018	2019
Non Union-Active															
Blue Cross															
HMO - Select Plus (formerly HMO 2017)	H011	EE only	207	6.93%	39	1.31%	220	45	50	\$ 4,848.12	\$ 5,020.44	\$ 5,207.72	\$ 1,068,361	\$ 223,677	\$ 260,751
HMO - Select Plus (formerly HMO 2017)	H011	EE + 1	5	0.17%	44	1.46%	5	50	56	\$ 9,696.12	\$ 10,040.88	\$ 10,415.44	\$ 51,611	\$ 497,061	\$ 579,446
HMO - Select Plus (formerly HMO 2017)	H011	EE + 2	204	6.83%	23	0.77%	217	26	29	\$ 14,544.24	\$ 15,061.44	\$ 15,623.16	\$ 3,158,606	\$ 391,439	\$ 456,314
HMO-Select (formerly HMO-Scripps 2017)	H015	EE only	1	0.03%	153	5.10%	1	173	194	\$ 4,848.12	\$ 6,527.28	\$ 6,716.59	\$ 5,161	\$ 1,128,710	\$ 1,305,256
HMO-Select (formerly HMO-Scripps 2017)	H015	EE + 1	226	7.56%	105	3.50%	241	119	133	\$ 9,696.12	\$ 13,054.32	\$ 13,433.17	\$ 2,332,817	\$ 1,549,181	\$ 1,791,528
HMO-Select (formerly HMO-Scripps 2017)	H015	EE + 2	1	0.03%	187	6.23%	1	211	238	\$ 14,544.24	\$ 19,581.60	\$ 20,149.76	\$ 15,483	\$ 4,138,551	\$ 4,785,938
Executive	E001	EE only	-	0.00%	-	-	-	-	-	\$ 8,426.04			\$ -	\$ -	\$ -
Executive	E001	EE + 1	-	0.00%	-	-	-	-	-	\$ 8,426.04			\$ -	\$ -	\$ -
Executive	E001	EE + 2	-	0.00%	-	-	-	-	-	\$ 8,426.04			\$ -	\$ -	\$ -
Health Care Plus	H017	EE only	138	4.62%	238	7.93%	147	269	302	\$ 6,632.64	\$ 6,871.20	\$ 6,973.84	\$ 974,406	\$ 1,848,281	\$ 2,108,165
Health Care Plus	H017	EE + 1	258	8.63%	151	5.03%	275	171	192	\$ 13,323.60	\$ 13,798.80	\$ 14,003.99	\$ 3,659,448	\$ 2,354,924	\$ 2,685,866
Health Care Plus	H017	EE + 2	229	7.66%	258	8.60%	244	292	328	\$ 19,950.48	\$ 20,664.48	\$ 20,972.32	\$ 4,863,659	\$ 6,025,634	\$ 6,872,612
Health Care Plus Contribution		EE only	138		238		147	269	302	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 146,911	\$ 268,990	\$ 302,296
Health Care Plus Contribution		EE + 1	258		151		275	171	192	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 549,318	\$ 341,323	\$ 383,586
Health Care Plus Contribution		EE + 2	229		258		244	292	328	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 487,573	\$ 583,188	\$ 655,398
Out-of-Area	H044	EE only	601	20.11%	-	0.00%	640	-	-	\$ 5,738.76	\$ 6,157.68	\$ 6,250.08	\$ 3,671,697	\$ -	\$ -
Out-of-Area	H044	EE + 1	442	14.79%	4	0.13%	471	5	5	\$ 11,477.52	\$ 12,315.48	\$ 12,500.16	\$ 5,400,632	\$ 55,676	\$ 63,508
Out-of-Area	H044	EE + 2	4	0.13%	5	0.17%	4	6	6	\$ 17,216.40	\$ 18,473.16	\$ 18,750.24	\$ 73,312	\$ 104,393	\$ 119,078
Total Blue Cross			2,316	77.48%	1,207	40.22%	2,466	1,364	1,533				\$ 26,458,994	\$ 19,511,027	\$ 22,369,742
Kaiser															
HMO	H018	EE only	1	0.03%	461	15.36%	1	521	586	\$ 4,848.12	\$ 5,020.44	\$ 5,207.72	\$ 5,161	\$ 2,615,780	\$ 3,049,329
HMO	H018	EE + 1	1	0.03%	328	10.93%	1	371	417	\$ 9,696.12	\$ 10,040.88	\$ 10,415.44	\$ 10,322	\$ 3,722,238	\$ 4,339,175
HMO	H018	EE + 2	312	10.44%	601	20.03%	332	679	763	\$ 14,544.24	\$ 15,061.44	\$ 15,623.16	\$ 4,830,809	\$ 10,230,563	\$ 11,926,117
Total Kaiser			314	10.51%	1,390	46.31%	334	1,571	1,766				\$ 4,846,293	\$ 16,568,581	\$ 19,314,622
Waives			221	7.39%	298	9.93%	235	337	379	\$ 1,080.00	\$ 1,080.00	\$ 1,080.00	\$ 254,092	\$ 363,746	\$ 408,786
Employees Not Covered			138	4.62%	106	3.53%	147	120	135						
Total Active			2,989		3,001	100.00%	3,182	3,392	3,812				\$ 31,559,379	\$ 36,443,354	\$ 42,093,149

Carrier / Type	Plan Code	Coverage Type	(a) Participants						(b) Annual Employer Only Rates			(a) x (b) = Total ER Premium				
			Actual	(a1)	Actual	(a2)	(a1) * (1)	(a2) * (1)		Actual		Prelim Actual	Projected			
			02/28/17	% of 2/28/17 Total	01/01/18	01/01/18 Total	2017	2018	2019	2017	2018	2019	2017	2018	2019	
Non Union - Leave																
Blue Cross																
HMO - Select Plus (formerly HMO 2017)	H011	EE only	12	0.00%	2			3	2	2	\$ 4,848.12	\$ 5,020.44	\$ 5,207.72	\$ 14,544	\$ 10,041	\$ 10,415
HMO - Select Plus (formerly HMO 2017)	H011	EE + 1	9	0.00%	6			6	6	6	\$ 9,696.12	\$ 10,040.88	\$ 10,415.44	\$ 58,177	\$ 60,245	\$ 62,493
HMO - Select Plus (formerly HMO 2017)	H011	EE + 2	7	0.00%	5			7	5	5	\$ 14,544.24	\$ 15,061.44	\$ 15,623.16	\$ 101,810	\$ 75,307	\$ 78,116
HMO-Select (formerly HMO-Scripps 2017)	H015	EE only	-	0.00%	1			-	1	1	\$ 4,848.12	\$ 6,527.28	\$ 6,716.59	\$ -	\$ 6,527	\$ 6,717
HMO-Select (formerly HMO-Scripps 2017)	H015	EE + 1	-	0.00%	1			-	1	1	\$ 9,696.12	\$ 13,054.32	\$ 13,433.17	\$ -	\$ 13,054	\$ 13,433
HMO-Select (formerly HMO-Scripps 2017)	H015	EE + 2	-	0.00%	1			-	1	1	\$ 14,544.24	\$ 19,581.60	\$ 20,149.76	\$ -	\$ 19,582	\$ 20,150
Health Care Plus	H017	EE only	8	0.00%	4			1	4	4	\$ 6,632.64	\$ 6,871.20	\$ 6,973.84	\$ 6,633	\$ 27,485	\$ 27,895
Health Care Plus	H017	EE + 1	4	0.00%	2			1	2	2	\$ 13,323.60	\$ 13,798.80	\$ 14,003.99	\$ 13,324	\$ 27,598	\$ 28,008
Health Care Plus	H017	EE + 2	2	0.00%	3			1	3	3	\$ 19,950.48	\$ 20,664.48	\$ 20,972.32	\$ 19,950	\$ 61,993	\$ 62,917
Health Care Plus Contribution		EE only			4			1	4	4	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000	\$ 4,000	\$ 4,000
Health Care Plus Contribution		EE + 1			2			1	2	2	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000	\$ 4,000	\$ 4,000
Health Care Plus Contribution		EE + 2			3			1	3	3	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000	\$ 6,000	\$ 6,000
Out-of-Area	H044	EE only	-	0.00%	-			-	-	-	\$ 5,738.76	\$ 6,157.68	\$ 6,250.08	\$ -	\$ -	\$ -
Out-of-Area	H044	EE + 1	-	0.00%	-			-	-	-	\$ 11,477.52	\$ 12,315.48	\$ 12,500.16	\$ -	\$ -	\$ -
Out-of-Area	H044	EE + 2	-	0.00%	-			-	-	-	\$ 17,216.40	\$ 18,473.16	\$ 18,750.24	\$ -	\$ -	\$ -
Total Blue Cross			42	0.00%	25			19	25	25				\$ 219,437	\$ 315,832	\$ 324,144
Kaiser																
HMO	H018	EE only	54	1.81%	5			7	5	5	\$ 4,848.12	\$ 5,020.44	\$ 5,207.72	\$ 36,128	\$ 25,102	\$ 26,039
HMO	H018	EE + 1	19	0.64%	9			3	9	9	\$ 9,696.12	\$ 10,040.88	\$ 10,415.44	\$ 30,967	\$ 90,368	\$ 93,739
HMO	H018	EE + 2	7	0.23%	15			6	15	15	\$ 14,544.24	\$ 15,061.44	\$ 15,623.16	\$ 92,900	\$ 225,922	\$ 234,347
Total Kaiser			80	2.68%	29			17	29	29				\$ 159,995	\$ 341,392	\$ 354,125
Employees on Leave Not Covered			13					15	1	7						
Total Leave			135		54			51	55	61				\$ 379,432	\$ 657,224	\$ 678,269
Total Non Union			3,124		3,055			3,233	3,447	3,873				\$ 31,938,811	\$ 37,100,578	\$ 42,771,418
Union-Active																
Blue Cross																
HMO-Select (formerly HMO 2017)	H011	EE only	304	6.02%	61	1.32%		284	62	63	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 1,433,307	\$ 336,573	\$ 351,491
HMO-Select (formerly HMO 2017)	H011	EE + 1	15	0.30%	56	1.21%		14	57	57	\$ 10,099.20	\$ 10,840.92	\$ 11,245.30	\$ 141,445	\$ 617,963	\$ 645,361
HMO-Select (formerly HMO 2017)	H011	EE + 2	370	7.32%	89	1.92%		345	91	91	\$ 15,148.80	\$ 16,261.44	\$ 16,867.94	\$ 5,233,456	\$ 1,473,185	\$ 1,538,495
HMO-Select -Part Time (formerly HMO 2017)	H011	EE only	1	0.02%	6	0.13%		1	6	6	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 4,715	\$ 33,106	\$ 34,573
HMO-Select -Part Time (formerly HMO 2017)	H011	EE + 1	120	2.37%	1	0.02%		112	1	1	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 565,779	\$ 5,518	\$ 5,762
HMO-Select -Part Time (formerly HMO 2017)	H011	EE + 2	-	0.00%	-	0.00%		-	-	-	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ -	\$ -	\$ -
HMO-Blue CA Care (new)		EE only			242	5.22%			246	248		\$ 5,420.52	\$ 5,622.65	\$ -	\$ 1,335,256	\$ 1,394,441
HMO-Blue CA Care (new)		EE + 1			193	4.16%			196	198		\$ 10,840.92	\$ 11,245.30	\$ -	\$ 2,129,765	\$ 2,224,191
HMO-Blue CA Care (new)		EE + 2			217	4.68%			221	222		\$ 16,261.44	\$ 16,867.94	\$ -	\$ 3,591,922	\$ 3,751,161
Health Care Plus	H013	EE only	82	1.62%	135	2.91%		77	137	138	\$ 6,783.36	\$ 7,275.48	\$ 7,384.07	\$ 519,359	\$ 999,778	\$ 1,021,582
Health Care Plus	H013	EE + 1	456	9.02%	114	2.46%		426	116	117	\$ 13,626.36	\$ 14,610.48	\$ 14,827.75	\$ 5,801,674	\$ 1,695,421	\$ 1,732,304
Health Care Plus	H013	EE + 2	126	2.49%	183	3.95%		118	186	188	\$ 20,403.96	\$ 21,880.08	\$ 22,205.99	\$ 2,400,455	\$ 4,075,756	\$ 4,164,521
Health Care Plus Contribution		EE only	82		135			77	137	138	\$ 500.00	\$ 500.00	\$ 500.00	\$ 38,282	\$ 68,709	\$ 69,175
Health Care Plus Contribution		EE + 1	456		114			426	116	117	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 425,768	\$ 116,041	\$ 116,828
Health Care Plus Contribution		EE + 2	126		183			118	186	188	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 117,647	\$ 186,277	\$ 187,540
Out-of-Area	H014	EE only	17	0.34%	4	0.09%		16	4	4	\$ 5,738.76	\$ 6,157.68	\$ 6,250.08	\$ 91,091	\$ 25,072	\$ 25,621
Out-of-Area	H014	EE + 1	1,035	20.48%	20	0.43%		966	20	20	\$ 11,477.52	\$ 12,315.48	\$ 12,500.16	\$ 11,091,673	\$ 250,720	\$ 256,206
Out-of-Area	H014	EE + 2	4	0.08%	11	0.24%		4	11	11	\$ 17,216.40	\$ 18,473.16	\$ 18,750.24	\$ 64,300	\$ 206,844	\$ 211,370
Total Blue Cross			2,530	50.07%	1,332	28.74%		2,362	1,356	1,365				\$ 27,928,951	\$ 17,147,905	\$ 17,730,623
Kaiser																
HMO	013M	EE only	482	9.54%	919	19.83%		450	935	942	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 2,272,546	\$ 5,070,662	\$ 5,295,418
HMO	013M	EE + 1	51	1.01%	544	11.74%		48	554	557	\$ 10,099.20	\$ 10,840.92	\$ 11,245.30	\$ 480,912	\$ 6,003,068	\$ 6,269,222
HMO	013M	EE + 2	857	16.96%	1,126	24.29%		800	1,146	1,154	\$ 15,148.80	\$ 16,261.44	\$ 16,867.94	\$ 12,121,816	\$ 18,638,270	\$ 19,464,552
HMO-Part Time	013M	EE only	4,054	80.23%	149	3.21%		3,785	152	153	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 19,113,902	\$ 822,120	\$ 858,561
HMO-Part Time	013M	EE + 1	6,638	131.37%	1	0.02%		6,198	1	1	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 31,297,011	\$ 5,518	\$ 5,762
HMO-Part Time	013M	EE + 2	1	0.02%	-	0.00%		1	-	-	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 4,715	\$ -	\$ -
Total Kaiser			12,083	239.13%	2,739	59.09%		11,282	2,788	2,807				\$ 65,290,902	\$ 30,539,637	\$ 31,893,515

Carrier / Type	Plan Code	Coverage Type	(a) Participants						(b) Annual Employer Only Rates			(a) x (b) = Total ER Premium					
			(a1)		(a2)		(a1) * (1)		(a2) * (1)			Actual			Projected		
			Actual 02/28/17	% of 2/28/17 Total	Actual 01/01/18	01/01/18 Total	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018
Waives																	
Union-Part Time			174	3.44%	89	1.92%	162	91	91	\$ 1,200.00	\$ 1,200.00	\$ 1,200.00	\$ 194,957	\$ 108,712	\$ 109,450		
Union-Full Time			415	8.21%	360	7.77%	387	366	369	\$ 600.00	\$ 600.00	\$ 600.00	\$ 232,492	\$ 219,868	\$ 221,359		
Total Waives			589	11.66%	449	9.69%	550	457	460				\$ 427,449	\$ 328,580	\$ 330,809		
Employees Not Covered			(10,149)	-200.85%	115	2.48%	(9,476)	149	180				\$ -	\$ -	\$ -		
Total Union			5,053	100.00%	4,635	100.00%	4,718	4,750	4,812				\$ 93,647,302	\$ 48,016,122	\$ 49,954,948		
Union - Leaves																	
Blue Cross																	
HMO-Select (formerly HMO 2017)	H011	EE only	1	0.00%	3		1	3	3	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 5,050	\$ 16,262	\$ 16,868		
HMO-Select (formerly HMO 2017)	H011	EE + 1	1	0.00%	3		1	3	3	\$ 10,099.20	\$ 10,840.92	\$ 11,245.30	\$ 10,099	\$ 32,523	\$ 33,736		
HMO-Select (formerly HMO 2017)	H011	EE + 2	44	0.00%	10		44	10	10	\$ 15,148.80	\$ 16,261.44	\$ 16,867.94	\$ 666,547	\$ 162,614	\$ 168,679		
HMO Select-Part Time (formerly HMO 2017)	H011	EE only	326	0.00%	-		326	-	-	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 1,646,170	\$ -	\$ -		
HMO Select-Part Time (formerly HMO 2017)	H011	EE + 1	-	0.00%	-		-	-	-	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ -	\$ -	\$ -		
HMO Select-Part Time (formerly HMO 2017)	H011	EE + 2	-	0.00%	-		-	-	-	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ -	\$ -	\$ -		
HMO-Blue CA Care (new)		EE only			49			49	49		\$ 5,420.52	\$ 5,622.65		\$ 265,605	\$ 275,510		
HMO-Blue CA Care (new)		EE + 1			39			39	39		\$ 10,840.92	\$ 11,245.30		\$ 422,796	\$ 438,567		
HMO-Blue CA Care (new)		EE + 2			43			43	43		\$ 16,261.44	\$ 16,867.94		\$ 699,242	\$ 725,322		
Health Care Plus	H013	EE only	55	0.00%	10		55	10	10	\$ 6,783.36	\$ 7,275.48	\$ 7,384.07	\$ 373,085	\$ 72,755	\$ 73,841		
Health Care Plus	H013	EE + 1	48	0.00%	9		48	9	9	\$ 13,626.36	\$ 14,610.48	\$ 14,827.75	\$ 654,065	\$ 131,494	\$ 133,450		
Health Care Plus	H013	EE + 2	12	0.00%	18		12	18	18	\$ 20,403.96	\$ 21,880.08	\$ 22,205.99	\$ 244,848	\$ 393,841	\$ 399,708		
Health Care Plus Contribution		EE only	55		10		55	10	10	\$ 500.00	\$ 500.00	\$ 500.00	\$ 27,500	\$ 5,000	\$ 5,000		
Health Care Plus Contribution		EE + 1	48		9		48	9	9	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 48,000	\$ 9,000	\$ 9,000		
Health Care Plus Contribution		EE + 2	12		18		12	18	18	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 12,000	\$ 18,000	\$ 18,000		
Out-of-Area	H014	EE only	-	0.00%	2		-	2	2	\$ 5,738.76	\$ 6,157.68	\$ 6,250.08	\$ -	\$ 12,315	\$ 12,500		
Out-of-Area	H014	EE + 1	35	0.00%	-		35	-	-	\$ 11,477.52	\$ 12,315.48	\$ 12,500.16	\$ 401,713	\$ -	\$ -		
Out-of-Area	H014	EE + 2	48	0.00%	1		48	1	1	\$ 17,216.40	\$ 18,473.16	\$ 18,750.24	\$ 826,387	\$ 18,473	\$ 18,750		
Total Blue Cross			570	0.00%	187		570	187	187				\$ 4,915,464	\$ 2,259,921	\$ 2,328,930		
Kaiser																	
HMO	013M	EE only	3	0.06%	39		3	39	39	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 14,144	\$ 211,400	\$ 219,283		
HMO	013M	EE + 1	7	0.14%	42		7	42	42	\$ 10,099.20	\$ 10,840.92	\$ 11,245.30	\$ 66,008	\$ 455,319	\$ 472,302		
HMO	013M	EE + 2	44	0.87%	60		41	60	60	\$ 15,148.80	\$ 16,261.44	\$ 16,867.94	\$ 622,357	\$ 975,686	\$ 1,012,077		
HMO-Part Time	013M	EE only	380	7.52%	4		355	4	362	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ 1,791,634	\$ 21,682	\$ 2,034,702		
HMO-Part Time	013M	EE + 1	-	0.00%	-		-	-	-	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ -	\$ -	\$ -		
HMO-Part Time	013M	EE + 2	-	0.00%	-		-	-	-	\$ 5,049.60	\$ 5,420.52	\$ 5,622.65	\$ -	\$ -	\$ -		
Total Kaiser			434	8.59%	145		405	145	503				\$ 2,494,143	\$ 1,664,087	\$ 3,738,364		
Employees on Leave Not Covered			48				58	101	109								
Total Leave			1,052	8.59%	332		1,033	433	799				\$ 7,409,606	\$ 3,924,008	\$ 6,067,294		
Total Union			6,105		4,967		5,751	5,183	5,611				\$ 101,056,908	\$ 51,940,131	\$ 56,022,242		
Retiree Shift													\$ (2,915,895)	\$ (2,395,671)	\$ (2,449,574)		
Grand Total			9,229		8,022		8,984	8,630	9,484				\$ 130,079,824	\$ 86,645,037	\$ 96,344,085		

ATTACHMENT E-2

SDG&E
Updated Projected Medical Cost
For Years 2017-2019

ASSUMPTIONS

	Projected		
	2017	2018	2019
1. Total headcount based on initial number of employees as of December 2016 plus estimated increases or decreases each year provided by planners for their respective areas.	4,215	4,315	4,315
2. Projected adjusted non-represented headcount is as follows:	2,965	3,055	3,234
3. Projected adjusted represented headcount is as follows:	1,250	1,260	1,281
4. Participation in type and level of coverage is based on the enrollment for each plan, represented status (union or non-union) and coverage level as a percentage of the total enrollment as of February 2017 (a1) for the 2017 forecast and as of January 1, 2018 for the 2018 and 2019 forecasts.			
5. "Annual Employer Share of Premium" (b) for 2017 and 2018 reflect actual premiums net of employee contributions. 2019 amounts reflect preliminary premiums net of employee contributions.			
7. Employer medical costs for inactive employees for 2017 are based on enrollment as of 2/28/17, and 2018 and 2019 are based on the 1/1/18 enrollment.			
8. Retiree shift deduction is cost of the "Total ER Premium", for all Blue Cross and Kaiser HMO plans in 2017 and for the Kaiser HMO plan in 2018, shifted to the postretirement medical plans and calculated using percentages provided by Willis Towers Watson. This is done because medical rates for active employees and retirees under the age of 65 in these plans were/are negotiated together and therefore causes rates to be higher than they would be if negotiated separately. The projected 2017 credit is based on credits taken through June 2016. The 2018 credit was based on credits through July 2018 and increases in 2019 by half of the actual medical rate inflation.			

Carrier / Type	Plan Code	Coverage Level	(a) Participants						(b) Annual Employer Share of Premium			(a) x (b) = Total ER Premium				
			(a1)		(a2)		(a1) * (1)		(a1) * (2)		Actual 2017	Actual 2018	Prelim Actual 2019	Projected		
			Actual 02/28/17	% of 2/28/17 Total	Actual 01/01/18	% of 1/01/18 Total	2017	2018	2019	2017				2018	2019	
Non Union																
Blue Cross																
HMO-Select Plus (HMO 2017)	H021	EE only	247	8.44%	11	0.38%	250	12		\$ 4,848.12	\$ 5,020.44		\$ 1,213,862	\$ 58,429		
HMO-Select Plus (HMO 2017)	H021	EE + 1	208	7.11%	18	0.62%	211	19	Plan no longer offered. Assumed participants migrate to Health Care Plus.	\$ 9,696.12	\$ 10,040.88		\$ 2,044,373	\$ 191,221		
HMO-Select Plus (HMO 2017)	H021	EE + 2	333	11.38%	7	0.24%	338	7		\$ 14,544.24	\$ 15,061.44		\$ 4,909,464	\$ 111,546		
HMO-Select Plus PT (HMO 2017)	H021	EE only	1	0.03%	-	0.00%	1	-		\$ 4,848.12	\$ 5,020.44		\$ 4,914	\$ -		
HMO-Select Plus PT (HMO 2017)	H021	EE + 1	-	0.00%	-	0.00%	-	-		\$ 6,844.32	\$ 5,020.44		\$ -	\$ -		
HMO-Select Plus PT (HMO 2017)	H021	EE + 2	1	0.03%	1	0.03%	1	1		\$ 10,266.48	\$ 5,020.44		\$ 10,407	\$ 5,312		
HMO-Scripps (eliminated in 2018)	H025	EE only	16	0.55%	-	0.00%	16	-	Plan no longer offered.	\$ 4,848.12			\$ 78,631			
HMO-Scripps (eliminated in 2018)	H025	EE + 1	20	0.68%	-	0.00%	20	-		\$ 9,696.12			\$ 196,574			
HMO-Scripps (eliminated in 2018)	H025	EE + 2	10	0.34%	-	0.00%	10	-		\$ 14,544.24			\$ 147,431			
HMO-Select (new in 2018)	H025	EE only		0.00%	237	8.20%	-	251	265		\$ 6,527.28	\$ 6,716.59		\$ 1,635,492	\$ 1,781,532	
HMO-Select (new in 2018)	H025	EE + 1		0.00%	194	6.70%	-	205	217		\$ 13,054.32	\$ 13,433.17		\$ 2,673,625	\$ 2,912,417	
HMO-Select (new in 2018)	H025	EE + 2		0.00%	350	12.12%	-	370	392		\$ 19,581.60	\$ 20,149.76		\$ 7,252,962	\$ 7,900,707	
Executive	E001	EE only	-	0.00%	-	0.00%	-	-	-	\$ 8,426.04	\$ 8,426.04	\$ 8,426.04	\$ -	\$ -	\$ -	
Executive	E001	EE + 1	-	0.00%	-	0.00%	-	-	-	\$ 8,426.04	\$ 8,426.04	\$ 8,426.04	\$ -	\$ -	\$ -	
Executive	E001	EE + 2	-	0.00%	-	0.00%	-	-	-	\$ 8,426.04	\$ 8,426.04	\$ 8,426.04	\$ -	\$ -	\$ -	
Health Care Plus	H027	EE only	189	6.46%	197	6.82%	192	208	233		\$ 6,632.64	\$ 6,871.20	\$ 6,973.84	\$ 1,270,712	\$ 1,429,210	\$ 1,624,905
Health Care Plus	H027	EE + 1	137	4.68%	150	5.19%	139	159	188		\$ 13,323.60	\$ 13,798.80	\$ 14,003.99	\$ 1,850,295	\$ 2,194,009	\$ 2,632,750
Health Care Plus	H027	EE + 2	318	10.87%	295	10.22%	322	312	338		\$ 19,950.48	\$ 20,664.48	\$ 20,972.32	\$ 6,431,012	\$ 6,447,318	\$ 7,088,645
Health Care Plus-Part Time	H027	EE only	-	0.00%	-	0.00%	-	-	-		\$ 6,632.64	\$ 6,871.20	\$ 6,973.84	\$ -	\$ -	\$ -
Health Care Plus-Part Time	H027	EE + 1	-	0.00%	1	0.03%	-	1	1		\$ 6,844.32	\$ 6,871.20	\$ 6,973.84	\$ -	\$ 6,871	\$ 6,974
Health Care Plus-Part Time	H027	EE + 2	1	0.03%	-	0.00%	1	1	1		\$ 10,266.48	\$ 6,871.20	\$ 6,973.84	\$ 10,407	\$ 6,871	\$ 6,974
Health Care Plus Contribution		EE only	189		197		192	208	233		\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 191,585	\$ 208,000	\$ 233,000
Health Care Plus Contribution		EE + 1	137		151		139	160	189		\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 277,747	\$ 320,000	\$ 378,000
Health Care Plus Contribution		EE + 2	319		295		323	313	339		\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 646,725	\$ 626,000	\$ 678,000
Out-of-Area	H054	EE only	3	0.10%	3	0.10%	3	3	3		\$ 5,738.76	\$ 6,157.68	\$ 6,250.08	\$ 17,452	\$ 19,545	\$ 21,000
Out-of-Area	H054	EE + 1	8	0.27%	6	0.21%	8	6	7		\$ 11,477.52	\$ 12,315.48	\$ 12,500.16	\$ 93,076	\$ 78,180	\$ 84,001
Out-of-Area	H054	EE + 2	13	0.44%	13	0.45%	13	14	15		\$ 17,216.40	\$ 18,473.16	\$ 18,750.24	\$ 226,874	\$ 254,083	\$ 273,005
Total Blue Cross			1,505	51.45%	1,482	51.34%	1,526	1,569	1,660					\$ 19,621,540	\$ 23,518,672	\$ 25,621,910
Kaiser																
HMO	H028	EE only	362	12.38%	349	12.09%	367	369	391		\$ 4,848.12	\$ 5,020.44	\$ 5,207.72	\$ 1,779,020	\$ 1,853,780	\$ 2,035,602
HMO	H028	EE + 1	291	9.95%	286	9.90%	295	303	320		\$ 9,696.12	\$ 10,040.88	\$ 10,415.44	\$ 2,860,157	\$ 3,038,287	\$ 3,336,288
HMO	H028	EE + 2	431	14.74%	428	14.82%	437	453	479		\$ 14,544.24	\$ 15,061.44	\$ 15,623.16	\$ 6,354,291	\$ 6,820,264	\$ 7,489,150
HMO-Part Time	H028	EE only	3	0.10%	1	0.03%	3	1	1		\$ 4,848.12	\$ 5,020.44	\$ 5,207.72	\$ 14,743	\$ 5,312	\$ 5,833
HMO-Part Time	H028	EE + 1	1	0.03%	-	0.00%	1	-	-		\$ 6,844.32	\$ 5,020.44	\$ 5,207.72	\$ 6,938	\$ -	\$ -
HMO-Part Time	H028	EE + 2	1	0.03%	1	0.03%	1	1	1		\$ 10,266.48	\$ 5,020.44	\$ 5,207.72	\$ 10,407	\$ 5,312	\$ 5,833
Total Kaiser			1,089	37.23%	1,065	36.88%	1,104	1,127	1,193					\$ 11,025,556	\$ 11,722,954	\$ 12,872,705
Waives																
Non Union			312	10.67%	309	10.70%	316	327	346		\$ 1,080.00	\$ 1,560.00	\$ 1,560.00	\$ 341,568	\$ 510,004	\$ 539,887
Employees Not Covered																
			19	0.65%	31	1.07%	19	33	35					\$ -	\$ -	\$ -
Total Active			2,925	100.00%	2,887	100.00%	2,965	3,056	3,233					\$ 30,988,663	\$ 35,751,631	\$ 39,034,502

Carrier / Type	Plan Code	Coverage Level	(a) Participants							(b) Annual Employer Share of Premium			(a) x (b) = Total ER Premium			
			Actual 02/28/17	(a1)		(a2)		(a1) * (2)			Actual 2017	Actual 2018	Prelim Actual 2019	Projected		
				% of 2/28/17 Total	Actual 01/01/18	Total	2017	2018	2019	2017				2018	2019	
Employees on Leave																
Non Union																
Blue Cross																
HMO-Select Plus (HMO 2017-2018)	H021	EE only	15	-	-	15	-	-	-	\$ 4,848.12	\$ 5,020.44		\$ 72,722	\$ -		
HMO-Select Plus (HMO 2017-2018)	H021	EE + 1	7	-	-	7	-	-	-	\$ 9,696.12	\$ 10,040.88		\$ 67,873	\$ -		
HMO-Select Plus (HMO 2017-2018)	H021	EE + 2	11	-	-	11	-	-	-	\$ 14,544.24	\$ 15,061.44		\$ 159,987	\$ -		
HMO-Select Plus PT (HMO 2017-2018)	H021	EE only	1	-	1	1	-	1	1	\$ 4,848.12	\$ 5,020.44		\$ 4,848	\$ 5,020		
HMO-Select Plus PT (HMO 2017-2018)	H021	EE + 1	-	-	-	-	-	-	-	\$ 6,844.32	\$ 5,020.44		\$ -	\$ -		
HMO-Select Plus PT (HMO 2017-2018)	H021	EE + 2	-	-	-	-	-	-	-	\$ 10,266.48	\$ 5,020.44		\$ -	\$ -		
HMO-Scripps (eliminated in 2018)	H025	EE only	1	-	-	1	-	-	-	\$ 4,848.12			\$ 4,848			
HMO-Scripps (eliminated in 2018)	H025	EE + 1	-	-	-	-	-	-	-	\$ 9,696.12			\$ -			
HMO-Scripps (eliminated in 2018)	H025	EE + 2	-	-	-	-	-	-	-	\$ 14,544.24			\$ -			
HMO Select (new in 2018)	H025	EE only			9			9	9		\$ 6,527.28	\$ 6,716.59		\$ 58,746	\$ 60,449	
HMO Select (new in 2018)	H025	EE + 1			6			6	6		\$ 13,054.32	\$ 13,433.17		\$ 78,326	\$ 80,599	
HMO Select (new in 2018)	H025	EE + 2			8			8	8		\$ 19,581.60	\$ 20,149.76		\$ 156,653	\$ 161,198	
Executive	E001	EE only	-	-	-	-	-	-	-	\$ 8,426.04	\$ 8,426.04	\$ 8,426.04	\$ -	\$ -	\$ -	
Executive	E001	EE + 1	-	-	-	-	-	-	-	\$ 8,426.04	\$ 8,426.04	\$ 8,426.04	\$ -	\$ -	\$ -	
Executive	E001	EE + 2	-	-	-	-	-	-	-	\$ 8,426.04	\$ 8,426.04	\$ 8,426.04	\$ -	\$ -	\$ -	
Health Care Plus	H027	EE only	2	-	2	2	-	2	3	\$ 6,632.64	\$ 6,871.20	\$ 6,973.84	\$ 13,265	\$ 13,742	\$ 20,922	
Health Care Plus	H027	EE + 1	3	-	-	3	-	-	-	\$ 13,323.60	\$ 13,798.80	\$ 14,003.99	\$ 39,971	\$ -	\$ -	
Health Care Plus	H027	EE + 2	6	-	5	6	-	5	5	\$ 19,950.48	\$ 20,664.48	\$ 20,972.32	\$ 119,703	\$ 103,322	\$ 104,862	
Health Care Plus-Part Time	H027	EE only	-	-	-	-	-	-	-	\$ 6,632.64	\$ 6,871.20	\$ 6,973.84	\$ -	\$ -	\$ -	
Health Care Plus-Part Time	H027	EE + 1	-	-	-	-	-	-	-	\$ 6,844.32	\$ 6,871.20	\$ 6,973.84	\$ -	\$ -	\$ -	
Health Care Plus-Part Time	H027	EE + 2	-	-	-	-	-	-	-	\$ 10,266.48	\$ 6,871.20	\$ 6,973.84	\$ -	\$ -	\$ -	
Health Care Plus Contribution		EE only	2	-	2	2	-	2	3	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 2,000	\$ 2,000	\$ 3,000	
Health Care Plus Contribution		EE + 1	3	-	-	3	-	-	-	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 6,000	\$ -	\$ -	
Health Care Plus Contribution		EE + 2	6	-	5	6	-	5	5	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 12,000	\$ 10,000	\$ 10,000	
Out-of-Area	H054	EE only	-	-	-	-	-	-	-	\$ 5,738.76	\$ 6,157.68	\$ 6,250.08	\$ -	\$ -	\$ -	
Out-of-Area	H054	EE + 1	-	-	-	-	-	-	-	\$ 11,477.52	\$ 12,315.48	\$ 12,500.16	\$ -	\$ -	\$ -	
Out-of-Area	H054	EE + 2	-	-	-	-	-	-	-	\$ 17,216.40	\$ 18,473.16	\$ 18,750.24	\$ -	\$ -	\$ -	
Total Blue Cross			46		31			46	31				\$ 503,216	\$ 427,809	\$ 441,030	
Kaiser																
HMO	H028	EE only	7	-	5	7	-	5	5	\$ 4,848.12	\$ 5,020.44	\$ 5,207.72	\$ 33,937	\$ 25,102	\$ 26,039	
HMO	H028	EE + 1	3	-	6	3	-	6	6	\$ 9,696.12	\$ 10,040.88	\$ 10,415.44	\$ 29,088	\$ 60,245	\$ 62,493	
HMO	H028	EE + 2	7	-	7	7	-	7	7	\$ 14,544.24	\$ 15,061.44	\$ 15,623.16	\$ 101,810	\$ 105,430	\$ 109,362	
HMO-Part Time	H028	EE only	-	-	-	-	-	-	-	\$ 4,848.12	\$ 5,020.44	\$ 5,207.72	\$ -	\$ -	\$ -	
HMO-Part Time	H028	EE + 1	-	-	1	-	-	1	1	\$ 6,844.32	\$ 5,020.44	\$ 5,207.72	\$ -	\$ 5,020	\$ 5,208	
HMO-Part Time	H028	EE + 2	-	-	-	-	-	-	-	\$ 10,266.48	\$ 5,020.44	\$ 5,207.72	\$ -	\$ -	\$ -	
Total Kaiser			17		19			17	19				\$ 164,835	\$ 195,798	\$ 203,101	
Leaves Not Covered			16		20			16	30							
Total Leave			79		70			79	80				\$ 668,051	\$ 623,607	\$ 644,131	
Total Non Union			3,004		2,957			3,044	3,136				\$ 31,656,715	\$ 36,375,238	\$ 39,678,633	

ATTACHMENT F

Workpaper to Update Testimony of SoCalGas Postage Expenses

F-1 (Credit & Collections Postage 200004.001)

F-2 (Remittance Processing Postage 200005.001)

Southern California Gas Company

2019 GRC – UPDATE FILING

August 2018

Non-Shared Service Workpapers

ATTACHMENT F-1

(SoCalGas Credit & Collections Postage 200004.001)

Credit and Collections Postage 200004.001 Supplemental Workpaper 1 – Updated

	Collection Notices	Postage Expenditure	Cost per unit	
2014 actual	2,573,318	\$ 1,060,960	\$ 0.412	
2015 actual	2,481,773	\$ 1,042,176	\$ 0.420	
2016 actual	2,380,764	\$ 983,846	\$ 0.413	
2017 volume of notices forecasted between 2015 & 2016 volumes.				
			Updated Forecast	
2017 forecast	2,410,000	\$ 0.413	\$ 995,330	Updated Forecast Notes:
2018 forecast	2,410,000	\$ 0.416	\$ 1,002,560	assume no rate increase in 2017 from 2016 rate
2019 forecast	2,410,000	\$ 0.416	\$ 1,002,560	forecast 2018 rate = \$0.416 (based on \$0.005 increase in 2018 from 2017 base rate of \$0.411); 2018 volume of notices same as 2017
				assume no rate increase in 2019 from 2018 rate; 2019 volume of notices same as 2018

Southern California Gas Company

2019 GRC – UPDATE FILING

August 2018

Non-Shared Service Workpapers

ATTACHMENT F-2

(SoCalGas Remittance Processing Postage 200005.001)

	C	D	F	G	H	I	J	K	L	M
			Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast
			2012	2013	2014	2015	2016	2017	2018	2019
9	Total Active Meters		5,576,355	5,606,113	5,639,161	5,667,128	5,700,917	5,731,814	5,774,426	5,820,293
13	Volume									
14	Bills & Letters									
16	Billing Letters		75,812	76,127	74,437	74,983	70,706	66,489	62,364	58,203
17	Paper Bills		50,185,893	48,268,919	47,425,135	45,693,876	44,670,322	43,676,423	42,730,752	41,789,704
18	My Account Surpressed Bills		14,249,584	16,059,617	17,322,726	19,285,105	20,717,514	22,124,802	23,617,402	25,143,666
19	Consolidator e-Bills Delivered		2,625,917	2,997,520	3,146,649	3,189,911	3,260,250	3,324,452	3,406,911	3,492,176
20	Total		67,137,206	67,402,183	67,968,947	68,243,875	68,718,792	69,192,166	69,817,429	70,483,749
22			1,986,416	1,810,033	1,263,109	1,962,379	1,432,409			
25	Bills & Letters Per Meter									
26	Billing Letters		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
27	Paper Bills		9.00	8.61	8.41	8.06	7.84	7.62	7.40	7.18
28	My Account Surpressed Bills		2.56	2.86	3.07	3.40	3.63	3.86	4.09	4.32
29	Consolidator e-Bills Delivered		0.47	0.53	0.56	0.56	0.57	0.58	0.59	0.60
30	Total		12.04	12.01	12.05	12.03	12.05	12.07	12.09	12.11
34	Total Bills Per Meter		12.03	12.00	12.04	12.02	12.04	12.06	12.08	12.10
36	Letters Per Meter		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
41	Postal Rate						2016	2017	2018	2019
43	Billing Letters						Average rate	\$0.4040	\$0.4080	\$0.4130
44	Paper Bills						Average rate	\$0.3800	\$0.3780	\$0.3830
45	My Account Surpressed Bills						Average rate	\$0.3800	\$0.3780	\$0.3830
46	Consolidator e-Bills Delivered						Average rate	\$0.3800	\$0.3780	\$0.3830
47							Average rate - Combined	\$0.3800	\$0.3780	\$0.3830
51	Postage									
53	Billing Letters		\$28,312.00	\$29,173.00	\$30,098.00	\$30,851.00	\$28,581.87	\$27,128.00	\$25,756.00	\$24,038.00
54	Paper Bills		\$17,691,450.00	\$17,492,112.00	\$17,988,451.00	\$17,649,701.00	\$16,982,603.40	\$16,509,688.00	\$16,365,878.00	\$16,005,457.00
55	My Account Surpressed Bills		\$4,973,940.00	\$5,765,878.00	\$6,580,423.00	\$7,464,454.00	\$7,881,072.00	\$8,363,175.00	\$9,045,465.00	\$9,630,024.00
56	Consolidator e-Bills Delivered		\$916,599.00	\$1,076,198.00	\$1,195,325.00	\$1,234,681.00	\$1,240,220.00	\$1,256,643.00	\$1,304,847.00	\$1,337,503.00
57	Total		\$23,610,301.00	\$24,363,361.00	\$25,794,297.00	\$26,379,687.00	\$26,132,477.27	\$26,156,634.00	\$26,741,946.00	\$26,997,022.00
64	Bills Delivered by Channel - Percentage of Total Bills and Letters									
66	Billing Letters		0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
67	Paper Bills		74.8%	71.6%	69.8%	67.0%	65.0%	63.1%	61.2%	59.3%
68	My Account Surpressed Bills		21.2%	23.8%	25.5%	28.3%	30.1%	32.0%	33.8%	35.7%
69	Consolidator e-Bills Delivered		3.9%	4.4%	4.6%	4.7%	4.7%	4.8%	4.9%	5.0%
70	Total		100%	100%	100%	100%	100%	100%	100%	100%
72	Note: Total may include rounding differences.									
75	Less Suppressed and eBills		\$ (5,890,539.00)	\$ (6,842,076.00)	\$ (7,775,748.00)	\$ (8,699,135.00)	\$ (9,121,292.00)	\$ (9,619,818.00)	\$ (10,350,312.00)	\$ (10,967,527.00)
76	Additional FOF Postage Benefits						\$ (197,000.00)	\$ (1,091,000.00)	\$ (2,002,000.00)	
77	Net Postage Expenses		\$ 17,719,762.00	\$ 17,521,285.00	\$ 18,018,549.00	\$ 17,680,552.00	\$ 17,011,185.00	\$ 16,339,816.00	\$ 15,300,634.00	\$ 14,027,495.00
78			ties to Adjusted-Recorded (nominal) workpaper				ties to forecast in 2016 (\$000)			

	V	W	X	Y	Z	AA	AA	AD	AE	AF	AG
75											
76											
77	Break-down =>		Incremental Postage Required		Impact Due to Growth				Impact Due to Rate increase		
78				2017	2018	2019		2017	2018	2019	
79			Bills and Billing Letters								
80			Volume	473,374	625,263	666,320		69,192,166	69,817,429	70,483,749	
81			Year-over-Year	\$179,780	\$237,500	\$253,102		-\$155,623	\$347,812	\$1,974	
82			To the base year of 2016	\$179,780	\$417,280	\$670,382		(\$155,623)	\$192,189	\$194,163	
83											
84											
85											
86	Break-down =>		Incremental Postage Savings		Impact Due to Growth				Impact Due to Rate increase		
87				2017	2018	2019		2017	2018	2019	
88			Combined Electronic Bills								
89			Volume	1,471,490	1,575,059	1,611,529		25,449,254	27,024,313	28,635,842	
90			Year-over-Year	(\$559,166)	(\$598,522)	(\$612,381)		\$60,640	(\$131,972)	(\$4,834)	
91			To the base year of 2016	(\$559,166)	(\$1,157,688)	(\$1,770,069)		\$60,640	(\$71,332)	(\$76,166)	
92											
93											
94											
95	Break-down =>		Incremental Postage - Net		Impact Due to Growth				Impact Due to Rate increase		
96				2017	2018	2019		2017	2018	2019	
97											
98			Year-over-Year	(\$379,386)	(\$361,022)	(\$359,279)		-\$94,983	\$215,840	-\$2,860	
99			To the base year of 2016	(\$379,386)	(\$740,408)	(\$1,099,687)		(\$94,983)	\$120,857	\$117,997	
100											

Remittance Processing Postage - HEG 200005.001 Supplemental Workpaper 2 - Updated

	Year	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Forecast 2017	Forecast 2018	Forecast 2019
WPG 1	200005.001 Postage							
1a	Volume	27,078	242,600	465,547	638,235	841,954	1,045,673	1,249,392
1b	Increment		215,522	222,947	172,688	203,719	203,719	203,719
1c	Postal rate	\$0.384	\$0.405	\$0.413	\$0.403	\$0.403	\$0.408	\$0.408
1d	Increment					\$0.000	\$0.005	\$0.000
1e	Postage	\$10,398	\$98,367	\$192,125	\$257,126	\$339,307	\$426,635	\$509,752
1f	Increment		\$87,969	\$93,759	\$65,000	\$82,182	\$87,327	\$83,117
						* 2200-2355 AM	* 2200-2355 AM	** 2200-0678 CRP

ATTACHMENT G

**Workpaper to Update Testimony of
SDG&E Postage Expenses**

San Diego Gas & Electric Company

2019 GRC – UPDATE FILING

August 2018

Non-Shared Service Workpapers

Supplemental Workpapers for Postage Workpaper 100004.001

Updates to original supplemental workpaper pages 63-64 of 105

UPDATED Postage 100004.001 Supplemental Workpaper 1 - Historical and Forecast Data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R										
1	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Note: Historical and forecast volume of Bills & Notices is the same set of data used in Workpaper 100004.000 Remittance Processing Supplemental Workpaper 1																		
2	2012	2013	2014	2015	2016	2017	2018	2019																				
3						[A]	[A]	[A]																				
4	Total actual / forecast electric meters	1,397,678	1,405,218	1,412,939	1,421,829	1,430,175	1,440,919	1,454,331	1,468,391	Reference: Exhibit SDG&E-38 Customer Forecast Electric Witness: Kenneth Schiermeyer																		
5	Volume	Bills & Notices Volume Forecast									Bills & Notices Volume Forecast Change																	
6	Bills & Notices	[C] = (A x B)			[C] = (A x B)			[C] = (A x B)			2017	2018	2019															
7	RICOH - Grouped Bills	842,264	839,427	955,359	885,060	562,066	561,958	567,189	572,672	(108)	5,123	10,606																
8	Monterey Park (MPK) - Paper Bills	10,643,744	10,079,842	9,687,681	9,427,349	9,141,050	8,861,652	8,595,096	8,325,777	(279,398)	(545,954)	(815,273)																
9	My Account Surpressed Bills	4,448,597	4,955,778	5,380,205	5,870,166	6,410,828	6,959,639	7,533,435	8,120,202	548,811	1,122,607	1,709,374																
10	Consolidator e-Bills Delivered	771,581	872,905	931,842	908,366	918,765	922,188	930,772	939,770	3,423	12,007	21,005																
11	Other Notices	583,026	550,400	713,959	806,242	755,202	763,687	770,795	778,247	8,485	15,593	23,045																
12	Total	17,289,212	17,298,352	17,669,046	17,897,183	17,787,911	18,069,124	18,397,287	18,736,668	281,213	609,376	948,757																
13	MPK Bills & Notices (Sum of Rows 8:11)					17,225,845	17,507,166	17,830,098	18,163,996	281,321	604,253	938,151																
14	Combined Electronic Bills (Sum Rows 9:10)					7,329,593	7,881,827	8,464,207	9,059,972	552,234	1,134,614	1,730,379																
15											Bills & Notices Per Meter Forecast									Bills & Notices Per Meter Forecast Change to BY2016								
16		[B]			[B]			[B]			2016 - 2015	2017	2018	2019														
17	Bills & Notices Per Meter																											
18	RICOH - Grouped Bills	0.60	0.60	0.68	0.62	0.39	0.39	0.39	0.39	-0.230	0.000	0.000	0.000															
19	MPK - Paper Bills	7.62	7.17	6.86	6.63	6.39	6.15	5.91	5.67	-0.240	-0.240	-0.480	-0.720															
20	My Account Surpressed Bills	3.18	3.53	3.81	4.13	4.48	4.83	5.18	5.53	0.350	0.350	0.700	1.050															
21	Consolidator e-Bills Delivered	0.55	0.62	0.66	0.64	0.64	0.64	0.64	0.64	0.000	0.000	0.000	0.000															
22	Other Notices	0.42	0.39	0.51	0.57	0.53	0.53	0.53	0.53	-0.040	0.000	0.000	0.000															
23	Total	12.37	12.31	12.52	12.59	12.43	12.54	12.65	12.76	-0.160	0.110	0.220	0.330															
24											Postal Rate Forecast									Postal Rate Changes Effective 1/22/17								
25	Postal Rate										[2016 Postal Rate + Postal Rate Changes]									Postal Rate Changes Effective 1/21/2018								
26											[D]									[D]								
27											[D]									[D]								
28	Bills & Notices										Average Rate of flat mails									Blended rate of regular mails								
29	RICOH - Grouped Bills					\$0.653	\$0.661	\$0.666	\$0.666	\$0.666	\$0.008	\$0.005	\$0.000	\$0.6533	\$0.6533	\$0.6533												
30	MPK - Paper Bills					\$0.381	\$0.379	\$0.384	\$0.384	\$0.384	(\$0.002)	\$0.005	\$0.000	\$0.3820	\$0.3820	\$0.3820												
31	My Account Surpressed Bills					\$0.380	\$0.378	\$0.383	\$0.383	\$0.383	(\$0.002)	\$0.005	\$0.000	\$0.3820	\$0.3820	\$0.3820												
32	Consolidator e-Bills Delivered					\$0.380	\$0.378	\$0.383	\$0.383	\$0.383	(\$0.002)	\$0.005	\$0.000	\$0.3820	\$0.3820	\$0.3820												
33	Other Notices					\$0.408	\$0.412	\$0.417	\$0.417	\$0.417	\$0.004	\$0.005	\$0.000	\$0.3820	\$0.3820	\$0.3820												
34											Postal Rate Forecast									Postal Rate Changes Effective 1/22/17								
35											[E] = (C x D)									[E] = (C x D)								
36	Postage										Net Postage Forecast Impacts To BY2016									Postage Forecast Impact Due to Growth								
37	Bills & Notices										[E] = (C x D)									[Bills Per Meter Forecast Change X 2016 Blended Postal Rates]								
38	RICOH - Grouped Bills	\$534,015	\$555,756	\$634,749	\$563,365	\$367,213	\$371,638	\$377,933	\$381,587	\$4,425	\$10,720	\$14,374	\$20,717	\$71	\$3,347	\$6,929	\$4,496	\$7,373	\$7,445									
39	MPK - Paper Bills	\$3,791,483	\$3,664,918	\$3,688,376	\$3,664,274	\$3,484,734	\$3,359,613	\$3,301,533	\$3,198,082	(\$125,121)	(\$183,201)	(\$286,652)	(\$106,730)	(\$208,554)	(\$311,434)	(\$18,391)	\$25,353	\$24,782	\$24,782									
40	My Account Surpressed Bills	\$1,555,000	\$1,781,106	\$2,044,042	\$2,272,641	\$2,438,102	\$2,632,205	\$2,886,888	\$3,111,743	\$194,103	\$448,786	\$673,641	\$209,646	\$428,836	\$652,981	(\$15,543)	\$19,950	\$20,660	\$20,660									
41	Consolidator e-Bills Delivered	\$269,705	\$313,722	\$354,024	\$351,675	\$349,416	\$348,781	\$356,682	\$360,130	(\$635)	\$7,266	\$10,714	\$1,308	\$4,587	\$8,024	(\$1,943)	\$2,679	\$2,690										
42	Other Notices	\$216,898	\$210,606	\$292,072	\$335,580	\$308,256	\$314,774	\$321,558	\$324,667	\$6,518	\$13,302	\$16,411	\$3,241	\$5,957	\$8,803	\$3,277	\$7,345	\$7,608										
43	Total Postage	\$6,367,101	\$6,526,108	\$7,013,263	\$7,187,535	\$6,947,722	\$7,027,011	\$7,244,594	\$7,376,209	\$79,289	\$296,872	\$428,487	\$107,394	\$234,173	\$365,303	(\$28,105)	\$62,699	\$63,184										
44											Postage Forecast Impact Due to Rate Change									Postage Forecast Impact Due to Rate Change								
45	MPK Bills & Notices Postage (Sum of rows 39:42)					\$6,580,509	\$6,655,373	\$6,866,661	\$6,994,622	\$7,864	\$286,152	\$414,113	\$107,465	\$230,826	\$358,374	(\$32,601)	\$55,326	\$55,739	\$55,739									
46	Postage Savings Impacts (Combined Electronic Bills Savings (Sum of Rows 40:41)*-1)	(\$1,824,705)	(\$2,094,828)	(\$2,398,066)	(\$2,624,316)	(\$2,787,518)	(\$2,980,986)	(\$3,243,570)	(\$3,471,873)	(\$193,468)	(\$456,052)	(\$684,355)	(\$210,954)	(\$433,423)	(\$661,005)	\$17,486	(\$22,629)	(\$23,350)										
47	Total Postage Actual / Forecast (Sum of Rows 38, 39, and 42)	\$4,542,396	\$4,431,280	\$4,615,197	\$4,563,219	\$4,160,204	\$4,046,025	\$4,001,024	\$3,904,336	(\$114,179)	(\$159,180)	(\$255,868)	(\$103,560)	(\$199,250)	(\$295,702)	(\$10,619)	\$40,070	\$39,834										
48		Note: Totals may include rounding differences.																										

UPDATED Postage 10004.001 Supplemental Workpaper 2 - Postage Forecast Adjustment Summary

	A	B	C	D	E	F	G	H	I	J	K	L
1		Postage Forecast Impacts				Postage Impact Due to Electric Meter Growth				Postage Impact Due to Rate Changes		
2		2017	2018	2019		2017	2018	2019		2017	2018	2019
3												
4	RICOH - Grouped Bills ¹	\$4,425	\$10,720	\$14,374		(\$71)	\$3,347	\$6,929		\$4,496	\$7,373	\$7,445
5	MPK - Bills & Notices ²	\$74,864	\$286,152	\$414,113		\$107,465	\$230,826	\$358,374		(\$32,601)	\$55,326	\$55,739
6												
7	Postage Forecast Impacts Bills & Notices³	\$79,289	\$296,872	\$428,487		\$107,394	\$234,173	\$365,303		(\$28,105)	\$62,699	\$63,184
8												
9		Postage Forecast Savings				Postage Savings Due to Electric Meter Growth				Postage Savings Due to Rate Changes		
10		2017	2018	2019		2017	2018	2019		2017	2018	2019
11												
12	My Account Suppressed Bills ⁴	(\$194,103)	(\$448,786)	(\$673,641)		(\$209,646)	(\$428,836)	(\$652,981)		\$15,543	(\$19,950)	(\$20,660)
13	Consolidator e-Bills Delivered ⁵	\$635	-\$7,266	-\$10,714		(\$1,308)	(\$4,587)	(\$8,024)		\$1,943	(\$2,679)	(\$2,690)
14												
15	Postage Forecast Savings e-Bills⁶	(\$193,468)	(\$456,052)	(\$684,355)		(\$210,954)	(\$433,423)	(\$661,005)		\$17,486	(\$22,629)	(\$23,350)
16												
17		Net Postage Forecast Impacts				Net Postage Impact Due to Electric Meter Growth				Net Postage Impact Due to Rate Changes		
18		2017	2018	2019		2017	2018	2019		2017	2018	2019
19												
20	Net Postage Forecast Impacts⁷	(\$114,179)	(\$159,180)	(\$255,868)		(\$103,560)	(\$199,250)	(\$295,702)		(\$10,619)	\$40,070	\$39,834
21												
22	<i>Note: Totals may include rounding differences.</i>											
23												
24	¹ See Row 38 of Postage 10004.001 Supplemental Workpaper 1 - Historical and Forecast Data for calculations.											
25	² See Row 45 of Postage 10004.001 Supplemental Workpaper 1 - Historical and Forecast Data for calculations.											
26	³ See Row 43 of Postage 10004.001 Supplemental Workpaper 1 - Historical and Forecast Data for calculations.											
27	⁴ See Row 40 of Postage 10004.001 Supplemental Workpaper 1 - Historical and Forecast Data for calculations.											
28	⁵ See Row 41 of Postage 10004.001 Supplemental Workpaper 1 - Historical and Forecast Data for calculations.											
29	⁶ See Row 46 of Postage 10004.001 Supplemental Workpaper 1 - Historical and Forecast Data for calculations.											
30	⁷ See Row 48 of Postage 10004.001 Supplemental Workpaper 1 - Historical and Forecast Data for calculations.											

ATTACHMENT H

**Summary of Update Testimony of Results of
Operations - SoCalGas Incorporated Changes**

SoCalGas - Incorporated Changes to TY 2019
(\$ in 000)

SOURCE	HEARING EXHIBIT #	PAGE	WITNESS	AREA	TYPE	Description	CHANGE
Update Testimony		III.A	Wilder	Escalation	Escalation	Update OM and capital esc	
Update Testimony		VIII	Vanderhype	Shared Services	Overhead	Update Shared Service overheads to reflect updated payroll tax rates	
Update Testimony		VI.B.ii	Reeves	Taxes	Tax	Update ad valorem taxes, composite ad valorem tax rates	(2,214)
Update Testimony		VI.A	Reeves	Taxes	Tax	2019 payroll tax update to 7.41%	-0.03%
Update Testimony		VI.A	Reeves	Taxes	Tax	2018 payroll tax update to 7.37%	-0.06%
Rebuttal Testimony SCG-237	264	RGR-20	Reeves	Taxes	Tax	Correct formula error in the ad valorem tax calculation.	(3,626)
Rebuttal Testimony SCG-241	340	AMS-2	Steffen	Miscellaneous Revenues	Misc Rev	Forecast corrections for returned check charges	4
Rebuttal Testimony SCG-235	378	PDM-2	Moersen	Rate Base	Rate Base	SoCalGas accepts TURN's recommendation that the average 2016 M&S balance should be escalated instead of using the 2016 year-ending balance.	(835)
Rebuttal Testimony SCG-223	192/192C	CLH-A-312	Herrera	Fleet Services & Facility Operations	O&M	FACILITY OPERATIONS (2RF004.000)	(667)
Rebuttal Testimony SCG-209	63	DRH-13	Haines	Gas Engineering	O&M	ENGINEERING ANALYSIS CENTER - CHEMICAL LAB (2200-1178.000)	(75)
Rebuttal Testimony SCG-232	257	MG-1	Gevorkian	HR, Safety, Workers' Comp & LTD	O&M	Workers Comp And Long Term Disability (2HR006.001)	4,381
Hearing Transcript for July 31, 2018, Volume 17		2376	Gevorkian	HR, Safety, Workers' Comp & LTD	O&M	SCG DIRECTOR HR SERVICES (2HR004.000)	32
Hearing Transcript for July 31, 2018, Volume 17		2376	Gevorkian	HR, Safety, Workers' Comp & LTD	O&M	ECS SYSTEM REPORTING (2200-2397.000)	(32)
Hearing Transcript for July 19, 2018, Volume 18		1626	Rivera	Gas System Integrity	O&M	Public Awareness (2S1003.000) Corrections identified in the SoCalGas Customer Services Information area revise the GSI Public Awareness forecast.	40
Rebuttal Testimony SCG-233	320	RG-8	Gonzales	Accounting & Finance, Legal, Regulatory Affairs, External Affairs	O&M	Regulatory Tariffs & Info (2AG008.000)	(21)
Rebuttal Testimony SCG-220	158	RM-7	Magana	Customer Services - Information	O&M	CI-Customer Strategy And Engagement (2IN001.000)	(4)
Rebuttal Testimony SCG-220	158	RM-7	Magana	Customer Services - Information	O&M	CI-Customer Assistance Programs (2IN002.000)	(3)
Rebuttal Testimony SCG-220	158	RM-7	Magana	Customer Services - Information	O&M	CI-Customer Segment Services (2IN004.000)	(36)
Rebuttal Testimony SCG-220	158	RM-26	Magana	Customer Services - Information	O&M	Clean Transportation - Customer Support (2200-0234.000)	(20)
Rebuttal Testimony SCG-224	168/168C	RDT-6	Tattersall	Real Estate	O&M	GCT Rents (2200-0618.000)	(1,940)
Rebuttal Testimony SCG-222	294	JC/SF-7	Furbush	Supply Management	O&M	Supplier Diversity (2S5007.000)	(100)
Rebuttal Testimony SCG-238	175/175C	KCC-15	Chan	Working Cash	Working Cash	Goods & Services lag would increase by a total of 2.56 days, from 34.00 days to 35.56 days. With this adjustment, SCG's working cash requirement will be lower by \$5.0 million.	(5,001)
Rebuttal Testimony SCG-238	175/175C	KCC-19	Chan	Working Cash	Working Cash	Workers' Compensation amounts need to be tax effected to reflect the new federal tax rate of 21%. With this adjustment, SCG's working cash requirement will be lower by \$9.2 million.	(9,211)
Rebuttal Testimony SCG-238	175/175C	KCC-19	Chan	Working Cash	Working Cash	Workers' Compensation lag needs to be adjusted from 9 days to 18.8 days. With this adjustment, SCG's working cash requirement will be lower by \$0.6 million.	(579)
Rebuttal Testimony SCG-238	175/175C	KCC-19	Chan	Working Cash	Working Cash	2016 general ledger balances related to greenhouse gas (GHG) need to be adjusted. With this adjustment, SCG's working cash requirement will be lower by \$1.5 million.	(1,472)
Rebuttal Testimony SCG-238	175/175C	KCC-19	Chan	Working Cash	Working Cash	Bank lag needs to be adjusted from 1.00 day to 0.86 days. With this adjustment, SCG's working cash requirement will be lower by \$1.5 million.	(1,531)

SoCalGas - Incorporated Changes to TY 2019
(\$ in 000)

SOURCE	HEARING		WITNESS	AREA	TYPE	DESCRIPTION	BUDGET CODE(S)	BUDGET		
	EXHIBIT #	PAGE						2017	2018	2019
Update Testimony		II	Marelli	Customer Services - Field & Meter Reading	O&M	PAC results for MIR and MOR job classifications (2FC005.000)	N/A	-	1,447	1,419
Update Testimony		V.A	Baldwin	Customer Services - Office Operations	O&M	Postage rate increase (200004.001)	N/A	-	8	8
Update Testimony		V.A	Baldwin	Customer Services - Office Operations	O&M	Postage rate increase (200005.001)	N/A	-	214	215
Update Testimony		III.B	DeMontigny	Corporate Center - General Administration	O&M	Standard escalation update (2SE000.001)	N/A	87	177	263
Update Testimony		IV	Robinson	Compensation & Benefits	O&M	Standard escalation update (2PB000.000)	N/A	(1)	1,967	(1,703)
Rebuttal Testimony SCG-209	63	DRH-14	Haines	Gas Engineering	Capital	SoCalGas agrees with ORA's recommendation for Capital Tools and Lab Equipment	00730.00	270	-	-
Hearing Transcript of 7/12, Hearing exhibit 63A & 63B			Haines	Gas Engineering	Capital	SoCalGas accepts ORA recommended forecast for 2017 and also accepts ORA forecast methodology for 2018 and 2019	00617.00	(1,576)	(877)	(877)
Rebuttal Testimony SCG-204	10	GOM-142 to GOM-143	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's recommendation for Remote Meter reading and corrects its forecast in response to ORA-SCG-075-DAO	00182.00	551	(2,032)	-
Rebuttal Testimony SCG-204	10	GOM-89, GOM-92 to GOM-93	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	00151.00	6,710	-	-
Rebuttal Testimony SCG-204	10	GOM-89, GOM-117	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	00173.00	1,944	-	-
Rebuttal Testimony SCG-204	10	GOM-89, GOM-104	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	00254.00	56	-	-
Rebuttal Testimony SCG-204	10	GOM-89, GOM-100	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	00256.00	6,667	-	-
Rebuttal Testimony SCG-204	10	GOM-89, GOM-121	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	00261.00	(6,435)	-	-
Rebuttal Testimony SCG-204	10	GOM-89	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	00262.00	(4,694)	-	-
Rebuttal Testimony SCG-204	10	GOM-89, GOM-107	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	00265.00	(2,209)	-	-
Rebuttal Testimony SCG-204	10	GOM-89, GOM-97	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	00267.00	(2,376)	-	-
Rebuttal Testimony SCG-204	10	GOM-89	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	00270.00	2,048	-	-
Rebuttal Testimony SCG-204	10	GOM-89, GOM-137	Orozco	Gas Distribution	Capital	SoCalGas accepts ORA's use of the 2017 adjusted recorded capital amounts	01006.00	4,067	-	-
DR ORA-SCG-076-JOH			Phillips	PSEP	Capital	Correcting original response to DR ORA-SCG-076-JOH. Analysis done after DR indicates \$619K should be added to PTY project to ensure proper overhead allocation. And \$160K should be 2017 forecast instead of 2019 as stated in the DR.	00569.00	160	-	619

ATTACHMENT I

**Summary of Update Testimony of Results of Operations
SDG&E Incorporated Changes**

SDG&E - Incorporated Changes to TY 2019
(\$ in 000)

SOURCE	HEARING EXHIBIT #	PAGE	WITNESS	AREA	TYPE	Description	CHANGE
Update Testimony		III.A	Wilder	Escalation	Escalation	Update OM and capital esc	
Update Testimony		VIII	Vanderhype	Shared Services	Overhead	Update Shared Service overheads to reflect updated payroll tax rates	
Update Testimony		VI.B.ii	Reeves	Taxes	Tax	Update ad valorem taxes, composite ad valorem tax rates	739
Update Testimony		VI.A	Reeves	Taxes	Tax	2019 payroll tax update to 6.64%	-0.02%
Update Testimony		VI.A	Reeves	Taxes	Tax	2018 payroll tax update to 6.58%	-0.07%
Rebuttal Testimony SDG&E-235	267	RGR-22	Reeves	Taxes	Tax	Correct formula error in the ad valorem tax calculation.	(2,602)
Rebuttal Testimony SDG&E-234	391	DAW-20	Watson	Depreciation	Depreciation	Accepts ORA's proposal for life on WEP, Account E370.10 (Legacy Meters), and Account E370.2 (Legacy Meter Installations). Reduced electric depreciation rate by 0.004%	-0.004%
Rebuttal Testimony SDG&E-233	381	RCG - 7	Gentes	Rate Base	Rate Base	SDG&E accepts TURN's recommendation that the average 2016 M&S balance should be escalated instead of using the 2016 year-ending balance.	(17,610)
TURN-SEU DRs 47-28 and 47-29)			Gentes	Rate Base	Rate Base	SDG&E agrees to remove two projects at Palomar disallowed in the TY 2012 GRC. Removal of plant from plant-in-service.	(1,621)
TURN-SEU DRs 47-28 and 47-29)			Gentes	Rate Base	Rate Base	SDG&E agrees to remove two projects at Palomar disallowed in the TY 2012 GRC. Removal of accum depreciation	(330)
Rebuttal Testimony (SDG&E-218)	149	JDS-27	Stewart	Customer Services - Office Operations	O&M	Remittance Processing (10O004.000)	(7)
Rebuttal Testimony (SDG&E-217)	124	GRM-1	Marelli	Customer Service - Field	O&M	Customer Services Field - Operations (1FC001.000)	(10)
Rebuttal Testimony (SDG&E-231)	323	SKH-A-1, SKH-5	Hrna	Accounting & Finance, Legal, Regulatory Affairs, External Affairs	O&M	OPER CCTR-NSS-LEGAL -CLAIMS PAYMENTS AND RECOVERY COSTS (1AG008.000)	7
Rebuttal Testimony (SDG&E-231)	323	SKH-5	Hrna	Accounting & Finance, Legal, Regulatory Affairs, External Affairs	O&M	OPER CCTR-NSS-REGULATORY AFFAIRS - SDG&E TARIFF 62 (1AG009.000)	(11)
Update Testimony		VIII	Hom	Summary of Earnings	O&M	OPER CCTR-NSS-REGULATORY AFFAIRS - SDG&E TARIFF 62 Reversal of top-side adjustment for Helitanker (1AG009.000)	(3,999)
Rebuttal Testimony SDG&E-215	71	WHS-73 to WHS-74	Speer	Electric Distribution	O&M	Construction Services (1ED002.000)	(231)
Rebuttal Testimony SDG&E-215	71	WHS-73 to WHS-74	Speer	Electric Distribution	O&M	Electric Regional Operations (1ED011.000)	3,847
Rebuttal Testimony SDG&E-215	71	WHS-73 to WHS-74	Speer	Electric Distribution	O&M	Substation C&O (1ED015.000)	(38)
Rebuttal Testimony SDG&E-215	71	WHS-73 to WHS-74	Speer	Electric Distribution	O&M	Distribution And Engineering (1ED018.000)	(123)
Rebuttal Testimony SDG&E-230	364	TT-1	Taylor	HR, Safety, Workers' Comp & LTD	O&M	Workers Compensation (1HR002.001)	629
Rebuttal Testimony SDG&E-222	172	RDT-8	Tattersall	Real Estate, Land Services, & Facilities	O&M	HQ Rent & Facilities Maintenance (2100-0708.000)	(442)
Rebuttal Testimony SDG&E-220	294	JC/SF-7	Furbush	Supply Management	O&M	Supplier Diversity (1SS005.000)	(100)
Rebuttal Testimony SDG&E-236	178	SPD-18	Dais	Working Cash	Working Cash	Workers' Compensation amounts need to be tax effected to reflect the new federal tax rate of 21%. With this adjustment, SDG&E's working cash requirement will be lower by \$2.0 million.	(2,055)
Rebuttal Testimony SDG&E-236	178	SPD-18	Dais	Working Cash	Working Cash	Remove Prepaid Commercial Paper Interest. This lowers SDG&E's working cash requirement by \$0.2 million.	(211)
Rebuttal Testimony SDG&E-236	178	SPD-18	Dais	Working Cash	Working Cash	Remove Prepaid Ad Valorem Taxes. This lowers SDG&E's working cash requirement by \$2.8 million.	(2,783)
Rebuttal Testimony SDG&E-236	178	SPD-18	Dais	Working Cash	Working Cash	Remove Manzanita Wind Farm from Prelim Survey and Investigation. This lowers SDG&E's working cash requirement by \$1.3 million.	(1,267)
Rebuttal Testimony SDG&E-236	178	SPD-18	Dais	Working Cash	Working Cash	Update Worker's Comp Lag Days. This lowers SDG&E's working cash requirement by \$0.1 million.	(144)
Rebuttal Testimony SDG&E-236	178	SPD-18	Dais	Working Cash	Working Cash	Update PBOP payment lag days. This lowers SDG&E's working cash requirement by \$0.8 million.	(827)
Rebuttal Testimony SDG&E-236	178	SPD-18	Dais	Working Cash	Working Cash	Goods and Service lag increased by 1.56 days from 33.1 days to 34.66 days. This lowers SDG&E's working cash requirement by \$2.5 million.	(2,530)

SDG&E - Incorporated Changes to TY 2019
(\$ in 000)

SOURCE	HEARING		WITNESS	AREA	TYPE	DESCRIPTION	BUDGET CODE(S)	BUDGET		
	EXHIBIT #	PAGE						2017	2018	2019
Update Testimony		V.B	Stewart	Customer Services - Office Operations	O&M	Postage rate increase (100004.001)	N/A	-	49	48
Update Testimony		III.B	DeMontigny	Corporate Center - General Administration	O&M	Standard escalation update (1SE000.001)	N/A	33	137	205
Update Testimony		IV	Robinson	Compensation & Benefits	O&M	Standard escalation update (1PB000.000)	N/A	-	1,083	(408)
Update Testimony		VII	Tattersall	Real Estate, Land Services, & Facilities	O&M	SDGE Rents (1RE003.000)	N/A	-	(738)	(1,298)
Rebuttal Testimony SDG&E-228	211	DSR-A-1	Robinson	Compensation & Benefits	O&M	Compensation - Variable Pay (1CP000.000)	N/A	(2,012)	(2,073)	(2,195)
Rebuttal Testimony SDG&E-214	76	AFC-34	Colton	Electric Distribution	Capital	Equipment/Tools/Miscellaneous: SDG&E accepts 3-year average used to forecast 208 and 2019	002060.001	-	(1,494)	(1,992)
Rebuttal Testimony SDG&E-216	100	DB/GS-12	Baeman / Shimansky	Electric Generation	Capital	SDG&E accepts ORA's use of the 2017 adjusted recorded capital amounts	All BC in area	(507)	-	-
Rebuttal Testimony SDG&E-209	66	DRH-2 to DRH-3	Haines	Gas Engineering	Capital	SDG&E accepts ORA's use of the 2017 adjusted recorded capital amounts	All BC in area	621	-	-
Rebuttal Testimony SDG&E-222	172	RDT-10	Tattersall	Real Estate, Land Services, & Facilities	Capital	SDG&E corrects 3-year average calculation	00701A.001	-	(161)	-
Rebuttal Testimony SDG&E-222	172	RDT-19	Tattersall	Real Estate, Land Services, & Facilities	Capital	Move project in-service date to after TY 2019	00710A.006	-	-	-
Rebuttal Testimony SDG&E-222	172	RDT-21	Tattersall	Real Estate, Land Services, & Facilities	Capital	Move project in-service date to after TY 2019	00710A.007	-	-	-
Rebuttal Testimony SDG&E-222	172	RDT-22	Tattersall	Real Estate, Land Services, & Facilities	Capital	Move project in-service date to after TY 2019	00710A.004	-	-	-
Rebuttal Testimony SDG&E-204	14	GOM-32	Orozco	Gas Distribution	Capital	SDG&E accepts ORA's use of the 2017 adjusted recorded capital amounts	All BC in area	25,091	-	-
Rebuttal Testimony SDG&E-211	118	MTM-4	Martinez	TIMP/DIMP	Capital	SDG&E accepts ORA's use of the 2017 adjusted recorded capital amounts	All BC in area	12,592	-	-