

Company: San Diego Gas & Electric Company (U902M)
Proceeding: 2016 General Rate Case
Application: A.14-11-003
Exhibit: SDG&E-219

SDG&E

REBUTTAL TESTIMONY OF STEPHEN J. MIKOVITS

(INFORMATION TECHNOLOGY)

June 2015

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



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**SDG&E REBUTTAL TESTIMONY OF STEPHEN J. MIKOVITS
(INFORMATION TECHNOLOGY)**

I. SUMMARY OF DIFFERENCES

The Office of Ratepayer Advocates (“ORA”) and the Utility Consumers’ Action Network (“UCAN”) submitted testimony regarding SDG&E’s Information Technology (“IT”) requested funding in this proceeding.

Only ORA submitted testimony regarding SDG&E’s IT operations and maintenance (“O&M”) funding in this proceeding. Table SJM-1 depicts the difference between SDG&E’s total Test Year (“TY”) 2016 IT O&M forecast and ORA’s recommended amounts.

**Table SJM-1
Total SDG&E IT O&M (Shared & Non-Shared)**

TOTAL O&M - Constant 2013 (\$000)			
	Base Year 2013	Test Year 2016	Change
SDG&E ¹	89,951	109,109	19,158
ORA ²	89,951	99,201 ³	9,250

Only ORA and UCAN submitted testimony that directly addressed SDG&E’s requested IT Capital funding in this proceeding. Table SJM-2 depicts the difference between SDG&E’s 2014-2016 IT Capital forecast and these parties’ recommended amounts.

¹ Ex. SDG&E 19-R-Amended at SJM-iv.

² ORA’s recommendations for SDG&E Base Year, Test Year and several cost category-specific recommendations were impacted by an additional exclusion for Dynamic Pricing (“DP”) Refundable IOs per Decision (“D.”) 12-12-004 for SDG&E’s Dynamic Pricing Application. SDG&E previously provided information about this additional DP exclusion in my Amended Revised Testimony, (SDG&E-19-R-Amended) and Workpapers (SDG&E-19-WP-R-Amended) in May 2015. In Appendix A, attached hereto, SDG&E provides adjustments to ORA’s recommendations by cost category based on the impact of DP changes.

³ Exhibit (“Ex.”) ORA-15, Report on the Results of Operations for San Diego Gas & Electric Company and Southern California Gas Company, Test Year 2016 General Rate Case – Information Technology, ORA Witness P. Morse, April 24, 2015, at 2 (Table 15-1).

1 **Table SJM-2**

2 **Summary of SDG&E IT Capital**

TOTAL CAPITAL - Constant 2013 (\$000)			
	2014	2015	2016
SDG&E	94,274	62,084	35,388
ORA	88,635	62,084	35,388
UCAN ⁴	94,274	60,155 ⁵	33,994 ⁶

3 **II. INTRODUCTION**

4 **A. ORA Positions**

5 ORA issued its report on IT on April 24, 2015.⁷ The following is a summary of ORA's
6 positions regarding SDG&E's O&M expenses:

- 7 • ORA recommends TY 2016 Shared and Non-Shared service labor expenses of \$36.7
8 million, which is \$3.8 million lower than SDG&E's forecast of \$40.5 million.⁸
- 9 • ORA recommends using a six-year average (2009-2014) of labor expenses for a TY 2016
10 forecast of \$36.5 million and incremental labor expenses for Information Security of \$0.2
11 million for a TY 2016 forecast of \$36.7 million.⁹
- 12 • ORA recommends utilizing a five-year linear trend for "IT-Contract" non-labor expenses,
13 excluding Information Security, for a TY 2016 forecast of \$48.1 million, which is \$9
14 million lower than SDG&E's forecast of \$57.1 million.¹⁰
- 15 • ORA recommends using a five-year average for all non-labor expenses that are not
16 categorized by SDG&E as "IT contract" or Information Security expenses for a TY 2016
17 forecast of \$11.5 million, which is \$3 million higher than SDG&E's forecast of \$8.5
18 million.¹¹

⁴ Testimony of Briana Kobor, Laura Norin, and Mark Fulmer on behalf of The Utility Consumers' Action Network concerning Sempra's Revenue Requirement Proposals for San Diego Gas & Electric and SoCalGas. Ex. UCAN (M. Fulmer) at 84.

⁵ Ex. UCAN (M. Fulmer) at 84, lines 18-20. This figure includes UCAN recommend reduction of \$1.9 million in 2015 for Bill Redesign Project.

⁶ Ex. UCAN (M. Fulmer) at 84, lines 18-20. This figure includes UCAN recommend reduction of \$1.4 million in 2016 for Bill Redesign Project.

⁷ See generally Ex. ORA-15 (witness P. Morse).

⁸ Ex. ORA-15 at 1, lines 13-15. The ORA recommendation stated herein reflects any applicable impact of DP changes. See Appendix A.

⁹ Ex. ORA-15 at 1, lines 13-15. The ORA recommendation stated herein reflects any applicable impact of DP changes. See Appendix A.

¹⁰ Ex. ORA-15 at 1, lines 22-24.

¹¹ Ex. ORA-15 at 1, lines 25-28. The ORA recommendation stated herein reflects any applicable impact of DP changes. See Appendix A.

- 1 • ORA recommends approving SDG&E’s TY 2016 incremental non-labor request for
2 Information Security of \$1.8 million, thereby approving a total \$2.9 million for TY 2016
3 Information Security expenses.¹²
- 4 • ORA recommends as part of SDG&E’s next General Rate Case (“GRC”) filing to track
5 O&M expenses and capital expenditures for Cybersecurity and Risk Management in the
6 four areas presented in this TY 2016 GRC, Governance and Compliance, Awareness and
7 Outreach, Security Engineering, and Security Operations.¹³

8 The following is a summary of ORA’s positions regarding SDG&E’s capital
9 expenditures:

- 10 • ORA recommends utilizing 2014 adjusted-recorded capital expenditure of \$88.7 million,
11 which is \$5.6 million less than SDG&E’s forecast of \$94.3 million.¹⁴
- 12 • ORA accepts SDG&E’s forecasts for 2015 and 2016 of \$62.1 million and \$35.4 million,
13 respectively.¹⁵

14 **B. UCAN Positions**

15 The Utility Consumers’ Action Network (UCAN) submitted testimony on May 15,
16 2015.¹⁶ The following is UCAN’s position as related to SDG&E’s IT Capital Funding request:

- 17 • “UCAN is supportive of the goal of redesigning bills in order to help customers better
18 understand their energy usage and their bills. However, UCAN is troubled by the lack of
19 information provided on the proposed budget and SDG&E’s inability to provide more a
20 detailed breakdown of costs by activity. Without a more detailed forecast of bill redesign
21 costs that justifies the need for \$3.3 million to complete this project, UCAN requests that
22 funding be denied.”¹⁷

23 **C. SDG&E Amended Revised Testimony and Workpapers**

24 SDG&E filed Amended Revised testimony and Amended Revised Workpapers in May
25 2015 to provide correct information reflecting an exclusion for Dynamic Pricing (“DP”)
26 Refundable Internal Orders resulting from D.12-12-004 (SDG&E’s Dynamic Pricing
27 Application).¹⁸ The resulting adjustments impacted both SDG&E Labor and Non-Labor O&M
28 costs that had been included in historical data ranging from 2010-2013 and had been submitted

¹²Ex. ORA-15 at 1, lines 29-31.

¹³ Ex. ORA-15 at 2, lines 1-5.

¹⁴ Ex. ORA-15 at 2, lines 8-10.

¹⁵Ex. ORA-15 at 2, lines 11-12.

¹⁶ Ex. UCAN (M. Fulmer) at 82 through 84.

¹⁷ Ex. UCAN (M. Fulmer) at 84, lines 14 - 20.

¹⁸ The reduction is related to the actual recorded IT costs that were captured using multiple Internal Orders after the establishment of the Dynamic Pricing Balancing Account. See Ex. SDG&E-19-R-Amended at SJM-D-2 and SJM-D-3 for additional information.

1 to ORA in March 2015. The net impact of this change in Base Year 2013 was a total reduction
2 (including Labor and Non-Labor) of \$587k.¹⁹ When appropriate, tables presented in my
3 Rebuttal Testimony reflect the adjustment for this change. In the interest of transparency,
4 SDG&E has also re-calculated ORA's recommendations, as if ORA had the correct and updated
5 information about this Dynamic Pricing-related reduction, and including those recalculated
6 amounts in the tables throughout this Rebuttal Testimony. Details of the recalculations are
7 provided in Appendix A, attached hereto.

8 **III. REBUTTAL TO ORA PROPOSAL**

9 **A. Flawed Analysis used in ORA's O&M Proposals**

10 There are several fundamental flaws in how ORA has analyzed SDG&E's request for TY
11 2016 IT funding. The following sections identify these flaws in ORA's analysis and describe
12 why SDG&E believes the California Public Utilities Commission ("Commission") should reject
13 ORA's recommendations and instead adopt SDG&E's position.

14 **1. ORA used inconsistent forecast methodologies throughout its** 15 **testimony**

16 As described in my Amended Revised Testimony, in order to reflect the fact that IT is a
17 shared services organization with cost centers that provide services to both utilities, SDG&E and
18 SoCalGas use the base year 2013 adjusted recorded cost plus incremental activity to forecast TY
19 2016 costs for every IT cost category.²⁰ This forecast methodology is consistently used across
20 all workgroups and is similarly used for a majority of work groups in the prior rate case (TY
21 2012) for both SDG&E and SoCalGas.²¹

22 Unlike SDG&E, ORA used a variety of forecasting methodologies when developing its
23 final recommendations across SDG&E and SoCalGas IT cost categories. For example, ORA
24 used inconsistent approaches for similar incremental labor cost forecasts for the two utilities and
25 three different approaches for its non-labor cost forecast. Table SJM-3 depicts the varying
26 forecast methodologies used by ORA in contrast to the single base year plus incremental
27 activities adjustments methodology consistently applied for all cost categories by SDG&E and
28 SoCalGas.

¹⁹ The reduction of \$587k is \$34k more than previously footnoted in my March 2015 Revised Testimony, SDG&E-19-R at SJM-iv, fn1.

²⁰ Ex. SDG&E-19-R-Amended (S. Mikovits) at SJM-15, lines 27 - 28

²¹ See D.13-05-010 (issued May 14, 2013); see also Direct testimony of Jeffery C. Nichols, A.10-12-006, Ex. SDG&E-18-R, at JCN-27, line 14 through JCN-31, line 21.

Table SJM-3
Comparison of
SDG&E, SoCalGas and ORA Forecasting Methodologies – O&M

	SDG&E / SoCalGas Forecast Basis	ORA Forecast Basis
SDG&E IT		
Labor	Base year plus adjustments	Six year average, 2009-14 ²²
Labor - Information Security	Base year plus adjustments	Accepts SDG&E proposal ²³
Non-Labor	Base year plus adjustments	Five year average ²⁴
Non-Labor – Contracts	Base year plus adjustments	Five year trend ²⁵
Non-Labor - Information Security	Base year plus adjustments	Accepts SDG&E proposal ²⁶
SoCalGas IT		
Labor	Base year plus adjustments	Highest recorded, 2009-14 ²⁷
Labor - Information Security	Base year plus adjustments	Accepts SoCalGas proposal ²⁸
Non-Labor	Base year plus adjustments	Accepts SoCalGas proposal ²⁹

ORA’s inconsistent approach ignores the fact that IT is a shared services organization with cost centers that provide services to both SDG&E and SoCalGas.³⁰ As a shared service, IT is performing a consistent set of activities and services for SDG&E and SoCalGas, and thereby has similar cost structures for providing such services. A consistent forecast methodology should be used.

ORA’s use of multiple forecast methodologies is arbitrary and inconsistently applied among the cost categories. In addition, ORA’s inconsistent methodology approach across the complex IT organization is questionable. In contrast, SDG&E chose a single forecasting method that was applied consistently across all IT cost categories.

²² Ex. ORA-15 at 10, lines 7-8.

²³ Ex. ORA-15 at 18, lines 10-12.

²⁴ Ex. ORA-15 at 14, lines 7-10.

²⁵ Ex. ORA-15 at 146-7.

²⁶ Ex. ORA-15 at 18, lines 10-12.

²⁷ Ex. ORA-15 at 26, lines 7-10.

²⁸ Ex. ORA-15 at 31, lines 12-14.

²⁹ Ex. ORA-15 at 31, lines 2-4.

³⁰ Ex. SDG&E-19-R–Amended at SJM-4, lines 1-2.

1 **2. ORA lacks any basis for rejecting SDG&E’s consistent base year plus**
2 **adjustments forecast methodology**

3 Not only did ORA arbitrarily and inconsistently use a variety of different forecast
4 methodologies, but it also failed to provide any basis for rejecting SDG&E’s consistent use of
5 base year plus adjustments.

6 SDG&E consistently uses the same forecast methodology for all O&M labor forecasts.³¹
7 As I explain in my Amended Revised Testimony, the use of base year 2013 adjusted recorded
8 O&M labor expenses plus adjustments for TY 2016 incremental resource requirements is
9 appropriate and justified due to the nature of IT-related costs.³² The consistent use of base year
10 2013 adjusted recorded O&M labor expenses plus adjustments is reasonable for SDG&E
11 because:

- 12 • The pace of change in the technology industry continues to accelerate when compared to
13 prior years.³³
- 14 • A rapidly changing security threat landscape drives SDG&E’s current cybersecurity risk
15 management activities.³⁴
- 16 • Evolving regulatory requirements around customer data privacy are not fully reflected in
17 a historical average.³⁵
- 18 • The level of support provided by the IT Division continues to grow as new IT capital
19 projects and technologies are implemented.³⁶

20 SDG&E consistently applies this methodology across the entire forecast because the
21 themes do not change when considering the various cost categories. The same methodology was
22 also applied to SoCalGas’ IT forecasts since much of IT is a shared service and provides similar
23 services to both utilities.³⁷

24 ORA did not provide any support or rational basis for its request that the Commission
25 reject SDG&E’s consistent application of base year plus adjustments forecasting methodology.
26

³¹ Ex. SDG&E-19-R–Amended at SJM-2, lines 5-6.

³² Ex. SDG&E-19-R–Amended at SJM-2 line 8 through SJM-3, line 3.

³³ Ex. SDG&E-19-R–Amended at SJM-2, lines 8-9.

³⁴ Ex. SDG&E-19-R–Amended at SJM-2, lines 14-15.

³⁵ Ex. SDG&E-19-R–Amended at SJM-2, lines 17-18.

³⁶ Ex. SDG&E-19-R–Amended at SJM-2, lines 19-22.

³⁷ Ex. SCG-18-R at CRO-2, line 5 through CRO-3, line 3.

1 **B. Disputed Costs - O&M Labor Forecasts**

2 ORA recommends \$1.394 million for SDG&E's O&M incremental labor expenses,
3 which is \$3.824 million, or 73%, less than SDG&E's TY 2016 incremental request.³⁸ Table
4 SJM-4 depicts the difference between SDG&E's TY 2016 O&M Shared & Non-Shared Labor
5 forecast and ORA's proposal in this proceeding.

6 **Table SJM-4**

7 **Summary of SDG&E IT Shared & Non-Shared Labor O&M**

SHARED & NON-SHARED LABOR O&M - Constant 2013 (\$000)			
	Base Year 2013	Test Year 2016	Change
SDG&E	35,318	40,536	5,218
ORA	35,318	36,712 ³⁹	1,394 ⁴⁰

8 As explained in detail below, SDG&E provides sufficient detail through its testimony,
9 workpapers and responses to data requests to support its forecast. The Commission should adopt
10 SDG&E's TY 2016 incremental labor forecast of \$5.2 million for a total of \$40.5 million as
11 reasonable.

12 **1. SDG&E provides sufficient detail and analysis in support of**
13 **SDG&E's request of incremental TY 2016 labor expenses of \$5.2**
14 **million**

15 ORA asserts that SDG&E provided "no documents to support the level of requested
16 increases in labor expenses."⁴¹ Contrary to ORA's assertion, SDG&E's Amended Revised
17 Testimony and Amended Revised O&M Workpapers provide sufficient narrative and analytical
18 support for its incremental labor expenses request.⁴² SDG&E's workpapers provide details for
19 SDG&E's O&M labor expense forecast that is summarized in my Amended Revised Testimony.
20 Forecasted costs are categorized by shared and non-shared forecasts, and further into IT
21 functional groupings (i.e., Applications, Infrastructure, Information Security and IT Support).
22 Workpapers include additional details, such as cost center and activity descriptions, forecast

³⁸ Ex. ORA-15 at 3, lines 9-10.

³⁹ The ORA recommendation stated herein reflects any applicable impact of DP changes. See Appendix A.

⁴⁰ The ORA recommendation stated herein reflects any applicable impact of DP changes. See Appendix A.

⁴¹ Ex. ORA-15 at 12, lines 4-5.

⁴² See generally Ex. SDG&E-19-WP-R-Amended.

1 methodology explanations, 2009 through 2013 recorded costs (labor and non-labor), year-to-year
2 (2014-2016) line item incremental activities for 142 cost centers (shared and non-shared), and
3 explanations for incremental changes for each of the forecast years.

4 For example, a portion of SDG&E's overall labor forecast is tied to the increase in
5 Infrastructure support responsibilities in cost center 2100-3095 as a result of the implementation
6 of various capital projects, including the Construction, Planning and Design ("CPD") project and
7 the SDG&E Smart Grid Communication System ("SGCS") project.⁴³ This incremental
8 adjustment for cost center 2100-3095 is included in Shared O&M Infrastructure costs, which are
9 discussed in my Amended Revised Testimony,⁴⁴ and included in my O&M workpapers.⁴⁵ For
10 the reader's ease, a copy of the workpapers for cost center 2100-3095 is provided in Appendix B
11 (attached) as an example of the level of detailed support that SDG&E has provided in support of
12 its labor forecast.⁴⁶

13 SDG&E also provided additional analytical information in support of its requested labor
14 increases to ORA during discovery. In response to an ORA data request, (provided hereto as
15 Appendix C), SDG&E provided ORA with additional and comprehensive information about its
16 incremental labor forecast.⁴⁷ SDG&E's response provides a comprehensive overview of
17 SDG&E's entire incremental labor request (without having to sift through all 621 pages of O&M
18 workpapers) and documents all of SDG&E's estimating assumptions and calculations that were
19 utilized for its forecast.

20 In summary, contrary to ORA's assertion, SDG&E has provided sufficient detail and
21 analysis in support of its request of incremental TY 2016 labor expenses of \$5.2 million.

22 **2. SDG&E's use of "professional judgement" and "management**
23 **experience" is valid and supported**

24 SDG&E's labor request was forecasted, in part, using the professional judgement of its
25 IT staff on a cost center by cost center basis. Identifying upward cost pressures (or downward
26 relief in the form of cost savings) in an IT organization is not always directly correlated to a
27 simple business metric or key performance indicator ("KPI"), such as meter count or customer

⁴³ See Ex. SDG&E-19-WP-R-Amended at 219 -227.

⁴⁴ Ex. SDG&E-19-R-Amended at SJM-17 through SJM-19.

⁴⁵ See Ex. SDG&E-19-WP-R-Amended at 224.

⁴⁶ See generally, Appendix B attached hereto.

⁴⁷ SDG&E Response to ORA-SDG&E-DR-052-PM1 question 11, attached hereto as Appendix C.

1 growth. Furthermore, not all IT costs can be linked to specific business transactions and/or
2 activity levels or forecasted using a simple arithmetic-based method.

3 Instead, IT forecasting and planning often consists of experienced IT professionals taking
4 a wide variety of factors into consideration when developing an IT-related cost estimate, such as
5 an understanding of industry technology trends, hardware and software computing capabilities,
6 scope of specific operations, maintenance and support activities, evolving business priorities,
7 changing regulatory landscape, and/or workforce skillset needs. This is typically done based on
8 factors, such as the requirements of the project, staff's experience with implementing similar
9 projects and discussions with impacted operating groups. This analysis is included as part of
10 SDG&E's IT's project approval process and is taken into account when an assessment of a
11 project for approval is performed.

12 ORA asserts that "SDG&E's reliance on 'professional judgment' and 'management
13 experience' to forecast incremental labor expenses provides the Commission no analytical basis
14 or data to evaluate or determine the reasonableness of SDG&E's request."⁴⁸ Nowhere in its
15 testimony does ORA assert that the use of "professional judgment" and "management
16 experience" is not a valid tool when forecasting labor expenses. In fact, SoCalGas' use of
17 professional judgement and management experience is an acceptable forecast methodology in a
18 GRC, according to the guidelines governing these proceedings.⁴⁹

19 Contrary to ORA's assertion, SDG&E provides sufficient support describing how it used
20 its staff's judgement and experience, to the extent applicable, when developing its forecasted
21 labor request. For example, in the SDG&E's Non-Shared Services workpapers, under the
22 Category of Applications (attached hereto as Appendix D), SDG&E explains how it used its
23 staff's judgement and experience when forecasting the need for incremental full-time equivalents
24 ("FTEs") associated with several capital project implementations:⁵⁰

25 7.9 O&M FTEs at \$100k per employee and \$10k per employee in associated NL
26 costs (8 employees) split across 2015 and 2016. Support includes 1 admin, 2
27 CRM developers, 1 CEN developer, 3 SPP analysts, and an additional FTE

⁴⁸ Ex. ORA-15 at 12, lines 11-13.

⁴⁹ Rate Case Plan, as updated by D.07-07-004, at A31 (stating that "Where judgment is involved in setting an estimate level" the applicant must "explain why that particular level was adopted").

⁵⁰ Ex. SDG&E-19-WP-R-Amended, at 9 of 621, Workpaper 1IT001.000 - IT Applications NSS, provided hereto as Appendix D.

1 supporting additional production systems implemented via recently completed
2 capital projects.

3 The two primary assumptions underlying this cost center's incremental labor forecast, the
4 projected need for 7.9 incremental FTEs and the associated estimated non-labor costs of \$10,000
5 per employee, were based on professional judgement and management experience. Professional
6 judgement and management experience were used to assess the impacts of the scope of work for
7 several IT projects – Customer Relationship Management (“CRM”), Customer Energy Network
8 (“CEN”), Smart Pricing Program (“SPP”)⁵¹ – and the associated implications of these specific
9 projects related to technical support activities⁵² within SDG&E's IT operating environment.

10 The use of professional judgement and management experience, as in this case to forecast
11 FTEs, is typically done based on factors such as the requirements of the project, experience with
12 implementing similar projects and discussions with impacted operating groups. This analysis is
13 included as part of SDG&E's IT's project approval process and is taken into account when an
14 assessment of the project for approval is performed. Controls and/or checkpoints of this type are
15 methods implemented to ensure that IT costs are effectively managed across the division.

16 In summary, SDG&E provides a sufficient analytical basis and data to evaluate the
17 reasonableness of SDG&E's use of professional judgment” and “management experience” to
18 forecast incremental labor expenses.

19 **C. Disputed Costs - O&M Non-Labor Forecasts**

20 Table SJM-5 depicts the difference between SDG&E's Shared & Non-shared TY 2016 IT
21 O&M Non-Labor forecast and the recommendations provided by ORA in this proceeding.

⁵¹ SPP is an internal SDG&E project name and acronym for the IT-related implementation activities associated with D.12-12-004 in SDG&E's Dynamic Pricing Application.

⁵² Technical support activities include installation, configuration, quality assurance, operation, monitoring and/or troubleshooting activities necessary to ensure hardware and software systems can be used in support of business functions.

1 **Table SJM-5**

2 **Summary of SDG&E IT (Shared & Non-Shared) O&M Non-Labor**

IT (SHARED & NON-SHARED) O&M NON LABOR - Constant 2013 (\$000)			
	Base Year 2013	Test Year 2016	Change
SDG&E	54,633	68,573	13,940
ORA	54,633 ⁵³	62,563 ⁵⁴	7,905 ⁵⁵

3 **1. SDG&E provides sufficient details and analysis to support its**
4 **incremental TY 2016 non-labor expenses request of \$13.9 million**

5 ORA states that “SDG&E has provided no compelling analytical support for the forecast
6 TY 2016 incremental expenses” for its non-labor O&M forecast.⁵⁶ Contrary to ORA’s assertion,
7 my Amended Revised Testimony and discovery responses provide sufficient narrative and
8 analytical support for SDG&E’s incremental non-labor expenses request.⁵⁷ In addition,
9 SDG&E’s Amended Revised Workpapers provide details of SDG&E’s O&M non-labor expense
10 forecast as summarized in my Amended Revised Testimony. Forecasted costs are categorized by
11 shared and non-shared forecasts, and further into IT functional groupings (i.e., Applications,
12 Infrastructure, Information Security and IT Support). The workpapers include additional details,
13 such as cost center and activity descriptions, forecast methodology explanations, 2009 through
14 2013 recorded costs (labor and non-labor), year-to-year (2014-2016) line item incremental
15 activities for 142 cost centers, 139 of which have Non-Labor components (shared and non-
16 shared), and explanations for incremental changes for each of the forecast years.

17 SDG&E has provided additional analytical support for its requested non-labor increases
18 to ORA during discovery. In one response, (see Appendix C), SDG&E provided ORA with
19 additional information about its incremental combined labor and non-labor forecast.⁵⁸ This
20 response provides a comprehensive overview of SDG&E’s entire incremental non-labor request

⁵³ The ORA recommendation stated herein reflects any applicable impact of DP changes. See Appendix A.

⁵⁴ The ORA recommendation stated herein reflects any applicable impact of DP changes. See Appendix A.

⁵⁵ The ORA recommendation stated herein reflects any applicable impact of DP changes. See Appendix A.

⁵⁶ Ex. ORA-15 at 15, lines 5-7.

⁵⁷ See generally Ex. SDG&E-19-WP-R-Amended.

⁵⁸ SDG&E Response to ORA-SDG&E-DR-052-PM1 question 11, provided hereto as Appendix C.

1 (without having to sift through all 621 pages of O&M workpapers) and documents all of
2 SDG&E's estimating assumptions and calculations that were utilized for its forecast.

3 SDG&E also provided substantial analytical support for its requested TY 2016
4 incremental non-labor IT contract increases to ORA during discovery. For example, in one
5 response, (provided hereto as Appendix E), SDG&E provided a consolidated view of all IT
6 contract costs - including Information Security contracts - by Shared and Non-shared cost
7 centers.⁵⁹ As part of that same response, SDG&E provided a consolidated view of all IT contract
8 costs - including Information Security contracts - by contract type (i.e., Hardware, Software,
9 Services, Telecom and Other).⁶⁰ And, in yet another response, SDG&E provided a
10 comprehensive and detailed view of all individual software vendor contracts.⁶¹ These details
11 include the following for each contract:

- 12 • Contract vendor Name (redacted to protect confidential information), but illustrative of
13 the 175 distinct third party vendors,
- 14 • Contract Start Date and End Dates,
- 15 • Whether the contract was categorized as Shared or Non-Shared, and
- 16 • 2009 through 2013 historical costs.

17 In summary, contrary to ORA's assertion, SDG&E provides sufficient detail and analysis
18 in support of its request of incremental TY 2016 labor expenses of \$13.9 million.

19 **2. ORA's use of a five-year linear trend will not adequately fund IT**
20 **contract expenditures during the TY 2016 forecast period**

21 ORA recommends "using a five-year (2009-2013) linear trend to forecast TY 2016 'IT
22 contract' expenses."⁶² ORA's recommended methodology should be rejected and instead
23 SDG&E's base year plus adjustments should be used. If ORA's recommendation of \$2.6 million
24 for all IT contracts (excluding Information Security) were to be adopted, then SDG&E's \$11.6
25 million of IT contract expenditures during the forecast period could not be fully funded.⁶³

⁵⁹ SDG&E Response to ORA-SDG&E-DR-069-PM1 question 2, Part e and f, provided hereto as Appendix E.

⁶⁰ SDG&E Response to ORA-SDG&E-DR-069-PM1 question 2, Part a through c, provided hereto as Appendix E.

⁶¹ SDG&E Response to ORA-SDG&E-DR-052-PM1 question 2, Part a thru e, provided hereto as Appendix F.

⁶² Ex. ORA-15 at 13, lines 8-12. Nowhere in its testimony does ORA recommend that the Commission deny a specific SDG&E IT contract cost.

⁶³ See Appendix A, section "Contract Non-Labor (Less Info. Security)".

SDG&E’s current and expected future contractual obligations concern a wide array of IT basic services provided to both SDG&E and SoCalGas business functions (i.e., Help Desk/End User Desktop support, Mainframe support, Application Development and Maintenance support). Insufficient and inadequate funding levels for SDG&E’s current and expected future contractual obligations could likely lead to reductions in internal service provided to IT’s business clients, and potentially outages and/or extended delays in addressing technical issues with SDG&E’s customer-facing applications (i.e., My Account).

As I explained in my Amended Revised Testimony, SDG&E’s forecast for IT contract expenditures consisted of two primary cost drivers – new IT contract expenditures and ongoing IT contract expenditures.⁶⁴ Hence, there are two reasons why adopting ORA’s five year linear trend forecast methodology would lead to insufficient and inadequate funding levels.

a. New IT contract expenditures

First, SDG&E forecasts \$3.7 million for new IT contract expenditures in TY 2016 O&M Non-Labor using base year plus adjustments. Forecast expenditures are identified in my workpapers for specific Shared cost centers where new IT contract expenditures are anticipated.⁶⁵ Table SJM-6 depicts the specific Shared cost centers where new IT contract expenditures have been included in the forecast as incremental TY 2016 O&M Non-Labor IT contract costs.

Table SJM-6

New IT Contract Expenditures in O&M Non-Labor Incremental Forecast⁶⁶

Workpaper/ Cost Center	Workpaper/Cost Center Title	Brief Description	Assumptions	2016 \$(’000)
2100-3091	SOFTWARE DEV - DATABASE ADMINISTRATOR	Oracle database maintenance cost increases due to the current ULA expiration	Estimated contractual obligation to support Oracle database software	1,000
2100-3623	SHARED SOFTWARE DEVELOPMENT CONTRACTS	GIS system software and data maintenance costs	Contractual Obligation to support GIS system software. These costs were previously recorded in 2013 and forecasted in 2014-2015 in Electric Operations.	2,314
2100-3900	IT PORTFOLIO MANAGEMENT	Apptio business performance measurement system	Annual contract cost.	357
Contract Obligation Total				3,671

⁶⁴ Ex. SDG&E-19-R-Amended, at SJM-13, lines 13- 23.

⁶⁵ See generally Ex. SDG&E-19-WP-R-Amended.

⁶⁶ The information depicted in Table SJM-6 is an excerpt from Appendix C (SDG&E’s response to ORA-SDG&E-DR-052-PM1, Question 11).

1 For example, the reason that there are new IT contract expenditures for GIS in Cost Center 2100-
2 3623 depicted in Table SJM-6 is because this contract was previously funded outside of the IT
3 Division (see Appendix G for additional details).⁶⁷

4 These are costs that have not been included in any historical IT expenditures as of base
5 year 2013 because they have not yet been incurred by IT, and thus would not be reflected in any
6 historical trend analysis, including a five-year linear trend. Thus, ORA's recommended five year
7 linear trend forecast methodology does not take into consideration any new IT contract
8 expenditures that had not already been included in IT historical non-labor costs during the 2009
9 through 2013 time period. Thus, ORA's methodology should not be adopted because it does not
10 accurately reflect brand new IT contractual expenditures.

11 **b. Other IT contract expenditures**

12 Second, ORA's recommended five-year linear trend forecast methodology does not take
13 into consideration any new IT O&M contract expenditures resulting from the implementation of
14 capital projects. These types of costs would have been initially incurred as part of the capital
15 project (i.e., as warranty costs) and thus would not already be included in IT O&M historical
16 non-labor costs during the 2009 through 2013 time period.⁶⁸

17 In summary, SDG&E recommends that the Commission adopt SDG&E's TY 2016 O&M
18 Non-Labor incremental forecast of \$6.1 million for IT contract expenditures using the base year
19 with adjustments as reasonable and reject ORA's recommendation to use the 5-year forecast.

20 **IV. REBUTTAL TO PARTIES' CAPITAL PROPOSALS**

21 **A. ORA**

22 **1. Undisputed Costs - 2015 Capital Expenditures**

23 ORA agreed with SDG&E's 2015 capital expenditure forecast of \$62.1 million. The
24 Commission should adopt SDG&E's forecast as reasonable.

25 **2. Undisputed Costs - 2016 Capital Expenditures**

26 ORA agreed with SDG&E's 2016 capital expenditure forecast of \$35.4 million. The
27 Commission should adopt SDG&E's forecast as reasonable.

28

⁶⁷ SDG&E Response to ORA-SDG&E-DR-069-PM1, Question 7, provided hereto as Appendix G.

⁶⁸ Ex. SDG&E-19-R-Amended, at SJM-13, lines 14- 20.

1 **B. UCAN**

2 **1. Disputed Costs – Capital Forecast For Bill Redesign**

3 UCAN challenged SDG&E’s IT Capital Funding request for the Bill Redesign Project.
4 “UCAN is troubled by the lack of information provided on the proposed budget and SDG&E’s
5 inability to provide more a detailed breakdown of costs by activity. Without a more detailed
6 forecast of bill redesign costs that justifies the need for \$3.3 million to complete this project,
7 UCAN requests that funding be denied.”⁶⁹

8 UCAN’s recommendation should be rejected and the Commission should adopt
9 SDG&E’s capital forecast for the Bill Redesign project as reasonable. Please see the Rebuttal
10 Testimony of SDG&E witness Mr. Brad Baugh (Ex. SDG&E-214) for additional details.

11 **V. REBUTTAL TO ORA INFORMATION SECURITY PROPOSALS**

12 **A. Undisputed Costs - Labor O&M**

13 ORA agreed with SDG&E’s forecast for Information Security labor O&M.⁷⁰ The
14 Commission should adopt SDG&E’s TY 2016 incremental forecast of \$0.246 million for a total
15 of \$2.869 million as reasonable.

16 **B. Undisputed Costs - Non-Labor O&M**

17 ORA agreed with SDG&E’s forecast for Information Security non-labor O&M.⁷¹ The
18 Commission should adopt SDG&E’s TY 2016 incremental forecast of \$1.778 million for a total
19 of \$2.899 million as reasonable.

20 **C. Tracking of Cybersecurity and Risk Management expenditures**

21 SDG&E respectfully recommends that the Commission decline ORA’s suggestion⁷² to
22 track and report expenses for Cybersecurity and Risk Management efforts in the next GRC.
23 Cybersecurity and Risk Management efforts in the information technologies area are varied and
24 address many different systems, applications, infrastructure components and network topology.
25 Additionally, many efforts that provide risk management benefits also provide companion
26 benefits, such as increased system reliability and robustness, which make the risk management
27 aspect of those efforts difficult to unwind. Tracking and reporting is both administratively
28 burdensome and imprecise, and may in and of itself be revelatory of the nature and types of

⁶⁹ Ex. UCAN (M. Fulmer) at 84, lines 15 - 20.

⁷⁰ Ex. ORA-15 at 1, lines 16 -19.

⁷¹ Ex. ORA-15 at 1, lines 29 - 31.

⁷² Ex. ORA-15 at18, lines 22 - 25.

1 measures undertaken which may unintentionally compromise the Cybersecurity and Risk
2 Management measures employed.

3 Furthermore, the Risk Decision, D.14-12-025, adopts a Risk Spending Accountability
4 Report, which will have the effect of tracking risk-related spending, including spending on
5 cybersecurity and risk management, in some fashion. SDG&E anticipates that the Safety Model
6 Assessment Proceedings (“SMAP”) filings and subsequent Risk Assessment Mitigation Phase
7 (“RAMP”) filings will help shape the content of the Risk Spending Accountability Report.
8 SDG&E believes any discussions concerning the tracking of cybersecurity and risk management
9 costs are better suited to occur during the SMAP and RAMP proceedings, instead of the GRC.

10 **VI. CONCLUSION**

11 SDG&E has addressed the proposed recommendations presented by ORA and
12 demonstrated that ORA’s proposals are not warranted. In summary, SDG&E has demonstrated
13 the following:

- 14 • SDG&E’s TY 2016 O&M Labor forecast is reasonable;
- 15 • SDG&E’s TY 2016 O&M Non-Labor forecast is reasonable;
- 16 • SDG&E’s Capital Expenditure forecasts are reasonable;
- 17 • SDG&E’s Information Security O&M Labor and Non-Labor forecasts are reasonable;
18 and
- 19 • Tracking of Cybersecurity and Risk Management expenditures should be addressed in the
20 upcoming SMAP filings.

21 SDG&E has addressed the proposed recommendations presented by UCAN and
22 demonstrated that UCAN’s proposal is not warranted.⁷³ Accordingly, SDG&E’s Capital forecast
23 for the Bill Redesign Project in 2015 and 2016 should be adopted by the Commission.

24 Accordingly, SDG&E’s forecast for TY 2016 IT O&M Labor and Non-Labor expenses
25 and SDG&E’s IT Capital Expenditure forecasts should be adopted by the Commission.

26 This concludes my prepared rebuttal testimony.

⁷³ See Rebuttal Testimony of SDG&E witness Mr. Brad Baugh (Ex. SDG&E-214) for additional details.

APPENDIX
TO
REBUTTAL TESTIMONY
OF STEPHEN J. MIKOVITS
ON BEHALF OF SDG&E
INFORMATION TECHNOLOGY

APPENDIX ATTACHMENTS

- A. Summary of SDG&E and ORA historical and forecast changes resulting from exclusion for Dynamic Pricing (“DP”) Refundable Internal Orders.
- B. EX- SDG&E-19-WP-R-Amended - Cost Center 2100-3095, pages 219 - 227
- C. SDG&E Response to ORA-SDG&E-DR-052-PM1-Q11
- D. EX- SDG&E-19-WP-R-Amended – Workpaper 1IT001.000– IT Applications NSS, pages 5 - 13
- E. SDG&E Response to ORA-SDG&E-DR-069-PM1-Q2
- F. SDG&E Response to ORA-SDG&E-DR-052-PM1-Q2
- G. SDG&E Response to ORA-SDG&E-DR-069-PM1-Q7

APPENDIX A

Summary of SDG&E and ORA historical and forecast changes resulting from exclusion for Dynamic Pricing (“DP”) Refundable Internal Orders.

Appendix A – Summary of SDG&E and ORA historical and forecast changes resulting from exclusion for Dynamic Pricing (“DP”) Refundable Internal Orders

June 8, 2015

Information Security Labor

	2009	2010	2011	2012	2013	2014	2015	2016	Change	Variance
SDG&E	1,345	2,265	2,650	3,342	2,623	3,528	2,746	2,869	246	-
ORA Original	1,345	2,265	2,650	3,342	2,623	3,528	-	2,869	246	
ORA Proposed Re-Calculated by SDG&E ¹	1,345	2,265	2,650	3,342	2,623	3,528	-	2,869	246	

Comments
No Changes, ORA accepts SDG&E's proposal
No Changes, ORA accepts SDG&E's proposal
No Changes, ORA accepts SDG&E's proposal

Other Labor²

	2009	2010	2011	2012	2013	2014	2015	2016	Change	Variance
SDG&E	36,380	34,969	31,689	36,627	32,695	30,682	35,305	37,667	4,972	3,824
ORA Original	36,380	35,158	31,741	36,627	32,708	30,761	-	33,898	1,190	
ORA Proposed Re-Calculated by SDG&E ¹	36,380	34,969	31,689	36,627	32,695	30,682	-	33,843	1,148	

6-year ave. of total labor, incl. Info Security
6-year ave. of total labor, incl. Info Security

Total Labor

	2009	2010	2011	2012	2013	2014	2015	2016	Change	Variance
SDG&E	37,725	37,234	34,339	39,969	35,318	34,210	38,051	40,536	5,218	3,824
ORA Original	37,725	37,423	34,391	39,969	35,331	34,289	-	36,767	1,436	
ORA Proposed Re-Calculated by SDG&E ¹	37,725	37,234	34,339	39,969	35,318	34,210	-	36,712	1,394	

Original 6-year average calculation
Revised 6-year average calculation

						6-yr Ave	Change	
Original 6-year average calculation	37,725	37,423	34,391	39,969	35,331	34,289	36,521	1,190
Revised 6-year average calculation	37,725	37,234	34,339	39,969	35,318	34,210	36,466	1,148

Information Security Non-Labor³

	2009	2010	2011	2012	2013	2014	2015	2016	Change	Variance
SDG&E	560	1,072	1,880	1,796	1,121	1,296	2,724	2,899	1,778	-
ORA Original	560	1,072	1,882	1,796	1,123			2,901	1,778	
ORA Proposed Re-Calculated by SDG&E ¹	560	1,072	1,880	1,796	1,121	-	-	2,899	1,778	

Comments
\$2k change in BY 2013
\$2k change in BY 2014
\$2k change in BY 2015

Contract Non-Labor (Less Info. Security)⁴

	2009	2010	2011	2012	2013	2014	2015	2016	Change	Variance
SDG&E	41,391	40,883	40,484	42,954	45,556	44,800	48,704	57,156	11,600	9,034
ORA Original	41,391	40,883	40,484	42,954	45,556			48,122	2,566	
ORA Proposed Re-Calculated by SDG&E ¹	41,391	40,883	40,484	42,954	45,556	-	-	48,122	2,566	

Comments
No Change
No Change
No Change

Other Non-Labor⁵

	2009	2010	2011	2012	2013	2014	2015	2016	Change	Variance
SDG&E	11,382	11,203	10,353	16,446	7,956	7,043	8,263	8,518	562	(2,950)
ORA Original	11,382	11,284	10,355	16,698	7,979			11,540	3,561	
ORA Proposed Re-Calculated by SDG&E ¹	11,382	11,203	10,353	16,446	7,956			11,468	3,512	

Comments
5-year average
5-year average

Total Non-Labor

	2009	2010	2011	2012	2013	2014	2015	2016	Change	Variance
SDG&E	53,333	53,158	52,717	61,196	54,633	53,139	59,691	68,573	13,940	6,084
ORA Original	53,333	53,239	52,721	61,448	54,658	-	-	62,563	7,905	
ORA Proposed Re-Calculated by SDG&E ¹	53,333	53,158	52,717	61,196	54,633	-	-	62,489	7,856	

Comments

Total Labor & Non-Labor

	2009	2010	2011	2012	2013	2014	2015	2016	Change	Variance
SDG&E	91,058	90,392	87,056	101,165	89,951	87,349	97,742	109,109	19,158	9,908
ORA Original	91,058	90,662	87,112	101,417	89,989	34,289	-	99,330	9,341	
ORA Proposed Re-Calculated by SDG&E ¹	91,058	90,392	87,056	101,165	89,951	34,210	-	99,201	9,250	

Comments

Notes:

1. SDG&E re-calculated ORA's proposal using the revised historical expenses as per Exhibit SDG&E-19-R-Amended, May, 2015 and SDG&E-19-WP-R-Amended, May 2015
2. ORA uses a 6-year average
3. ORA accepts SDG&E's proposal
4. ORA uses a 5-year linear trend
5. ORA uses a 5-year average

APPENDIX B

EX- SDG&E-19-WP-R-Amended

Cost Center 2100-3095, pages 219 - 227

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

Beginning of Workpaper
2100-3095.000 - NETORK COMMUNICATION SERVICES DIRECTOR

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

Area: INFORMATION TECHNOLOGY
 Witness: Stephen J. Mikovits
 Category: B. Infrastructure
 Category-Sub: 1. Infrastructure
 Cost Center: 2100-3095.000 - NETORK COMMUNICATION SERVICES DIRECTOR

Activity Description:

This cost center includes the Director of IT Computing Infrastructure and his administrative support. Activities include department level management for plan, design, build, implementation and management of system-wide network and telecommunications infrastructure.

Forecast Explanations:

Labor - Base YR Rec

This method is most appropriate because the base year most accurately represents the current state of the IT workpapers. Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another.

Non-Labor - Base YR Rec

This method is most appropriate because the base year most accurately represents the current state of the IT workpapers. Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another.

NSE - Base YR Rec

NA

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2009	2010	2011	2012	2013	2014	2015	2016	
Labor		159	177	96	-24	136	136	553	969	
Non-Labor		516	279	207	61	31	31	236	291	
NSE		0	0	0	0	0	0	0	0	
Total		675	456	303	37	166	166	788	1,259	
FTE		1.3	1.5	0.9	-0.8	1.0	1.0	5.2	9.4	

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
 Witness: Stephen J. Mikovits
 Category: B. Infrastructure
 Category-Sub: 1. Infrastructure
 Cost Center: 2100-3095.000 - NETORK COMMUNICATION SERVICES DIRECTOR

Cost Center Allocations (Incurred Costs):

	2013 Adjusted-Recorded					2014 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	4	0	0	4	0.03	4	0	0	4	0.03
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	132	30	0	162	1.00	132	30	0	162	1.00
Total Incurred	136	30	0	166	1.03	136	30	0	166	1.03
% Allocation										
Retained	41.64%	41.64%				38.08%	38.08%			
SEU	54.70%	54.70%				58.32%	58.32%			
CORP	3.66%	3.66%				3.60%	3.60%			
Unreg	0.00%	0.00%				0.00%	0.00%			

	2015 Adjusted-Forecast					2016 Adjusted-Forecast				
	Labor	Non-Labor	NSE	Total	FTE	Labor	Non-Labor	NSE	Total	FTE
Directly Retained	4	0	0	4	0.03	4	0	0	4	0.03
Directly Allocated	0	0	0	0	0.00	0	0	0	0	0.00
Subj. To % Alloc.	549	235	0	784	5.20	965	290	0	1,255	9.40
Total Incurred	553	235	0	788	5.23	969	290	0	1,259	9.43
% Allocation										
Retained	38.08%	38.08%				38.08%	38.08%			
SEU	58.32%	58.32%				58.32%	58.32%			
CORP	3.60%	3.60%				3.60%	3.60%			
Unreg	0.00%	0.00%				0.00%	0.00%			

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
Witness: Stephen J. Mikovits
Category: B. Infrastructure
Category-Sub: 1. Infrastructure
Cost Center: 2100-3095.000 - NETORK COMMUNICATION SERVICES DIRECTOR

Cost Center Allocation Percentage Drivers/Methodology:

Cost Center Allocation Percentage for 2013

Calculations are based on the number of LAN IDs used across each utility and Parent (corporate center). The use of LAN IDs is appropriate as it accurately represents the allocation of time and resources between affiliates for this cost center.

Cost Center Allocation Percentage for 2014

Calculations are based on the number of LAN IDs used across each utility and Parent (corporate center). The use of LAN IDs is appropriate as it accurately represents the allocation of time and resources between affiliates for this cost center.

Cost Center Allocation Percentage for 2015

Calculations are based on the number of LAN IDs used across each utility and Parent (corporate center). The use of LAN IDs is appropriate as it accurately represents the allocation of time and resources between affiliates for this cost center.

Cost Center Allocation Percentage for 2016

Calculations are based on the number of LAN IDs used across each utility and Parent (corporate center). The use of LAN IDs is appropriate as it accurately represents the allocation of time and resources between affiliates for this cost center.

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
 Witness: Stephen J. Mikovits
 Category: B. Infrastructure
 Category-Sub: 1. Infrastructure
 Cost Center: 2100-3095.000 - NETWORK COMMUNICATION SERVICES DIRECTOR

Forecast Summary:

		In 2013 \$(000) Incurred Costs								
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	136	136	136	0	417	833	136	553	969
Non-Labor	Base YR Rec	31	31	31	0	205	260	31	236	291
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		166	166	166	0	622	1,093	166	788	1,259
FTE	Base YR Rec	1.0	1.0	1.0	0.0	4.2	8.4	1.0	5.2	9.4

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2014 Total	0	0	0	0	0.0	
2015	178	30	0	208	1.8	1-Sided Adj
<p>2.25 new employees to support new IT initiatives across the company in 2015 and in 2016. \$100k average salary plus \$10k per employee in associated NL costs.</p> <p>Incremental Employee requirements were estimated to be 15 headcount across the IT Division in 2015 and 2016. These 15 added employees are needed to support business growth and client IT support needs. The 15 headcount were prorated based upon 2013 spend by individual IT department and average O&C labor ratio for the base year.</p>						
2015	239	25	0	264	2.4	1-Sided Adj
<p>4.8 FTE s at \$100k per year and \$10k per employee in associated NL costs, split across 2015 and 2016. 5 telecom support technicians planned for SGCS deployment, based upon SCGS plan. Management estimate of 4 SAP/LINUX analysts to support the expanding SAP landscape, ECM system expansion, and CPD work completion.</p>						
2015	0	150	0	150	0.0	1-Sided Adj
<p>Develop a five-year network strategy and migration plan to leverage emerging technologies for improved reliability and performance of our network environment. Management estimate for average consulting engagement (4-6 months) to analyze networking capabilities across 80 manned and unmanned sites.</p>						
2015 Total	417	205	0	622	4.2	

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
 Witness: Stephen J. Mikovits
 Category: B. Infrastructure
 Category-Sub: 1. Infrastructure
 Cost Center: 2100-3095.000 - NETORK COMMUNICATION SERVICES DIRECTOR

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2016	178	30	0	208	1.8	1-Sided Adj

2.25 new employees to support new IT initiatives across the company in 2015 and in 2016. \$100k average salary plus \$10k per employee in associated NL costs.

Incremental Employee requirements were estimated to be 15 headcount across the IT Division in 2015 and 2016. These 15 added employees are needed to support business growth and client IT support needs. The 15 headcount were prorated based upon 2013 spend by individual IT department and average O&C labor ratio for the base year.

2016	178	30	0	208	1.8	1-Sided Adj
------	-----	----	---	-----	-----	-------------

2.25 new employees to support new IT initiatives across the company in 2015 and in 2016. \$100k average salary plus \$10k per employee in associated NL costs.

Incremental Employee requirements were estimated to be 15 headcount across the IT Division in 2015 and 2016. These 15 added employees are needed to support business growth and client IT support needs. The 15 headcount were prorated based upon 2013 spend by individual IT department and average O&C labor ratio for the base year.

2016	477	50	0	527	4.8	1-Sided Adj
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4.8 FTE s at \$100k per year and \$10k per employee in associated NL costs, split across 2015 and 2016. 5 telecom support technicians planned for SGCS deployment, based upon SCGS plan. Management estimate of 4 SAP/LINUX analysts to support the expanding SAP landscape, ECM system expansion, and CPD work completion.

2016	0	150	0	150	0.0	1-Sided Adj
------	---	-----	---	-----	-----	-------------

Develop a five-year network strategy and migration plan to leverage emerging technologies for improved reliability and performance of our network environment. Management estimate for average consulting engagement (4-6 months) to analyze networking capabilities across 80 manned and unmanned sites.

2016 Total	833	260	0	1,093	8.4	
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Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
Witness: Stephen J. Mikovits
Category: B. Infrastructure
Category-Sub: 1. Infrastructure
Cost Center: 2100-3095.000 - NETORK COMMUNICATION SERVICES DIRECTOR

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	273	290	228	170	117
Non-Labor	474	264	202	66	31
NSE	0	0	0	0	0
Total	748	553	430	236	148
FTE	2.1	2.3	1.8	1.3	0.9
Adjustments (Nominal \$) **					
Labor	-147	-147	-147	-191	0
Non-Labor	-3	-3	-3	-6	0
NSE	0	0	0	0	0
Total	-150	-150	-150	-197	0
FTE	-1.0	-1.0	-1.0	-2.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	126	142	81	-21	117
Non-Labor	471	261	199	60	31
NSE	0	0	0	0	0
Total	597	403	280	39	148
FTE	1.1	1.3	0.8	-0.7	0.9
Vacation & Sick (Nominal \$)					
Labor	19	23	12	-3	19
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	19	23	12	-3	19
FTE	0.2	0.2	0.1	-0.1	0.2
Escalation to 2013\$					
Labor	14	12	4	0	0
Non-Labor	45	18	8	1	0
NSE	0	0	0	0	0
Total	58	30	11	1	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	159	177	96	-24	136
Non-Labor	516	279	207	61	31
NSE	0	0	0	0	0
Total	675	456	303	37	166
FTE	1.3	1.5	0.9	-0.8	1.1

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
 Witness: Stephen J. Mikovits
 Category: B. Infrastructure
 Category-Sub: 1. Infrastructure
 Cost Center: 2100-3095.000 - NETORK COMMUNICATION SERVICES DIRECTOR

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	-147	-147	-147	-191	0
Non-Labor	-3	-3	-3	-6	0
NSE	0	0	0	0	0
Total	-150	-150	-150	-197	0
FTE	-1.0	-1.0	-1.0	-2.0	0.0

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From Cctr</u>	<u>RefID</u>
2009	-147	-3	0	-1.0	CCTR Transf	To 2200-2406.000	FFIGUERO20131 031124855210
IT Employee Transfer from SDGE to SCG as of 2013							
2009 Total	-147	-3	0	-1.0			
2010	-147	-3	0	-1.0	CCTR Transf	To 2200-2406.000	FFIGUERO20131 031124948890
IT Employee Transfer from SDGE to SCG as of 2013							
2010 Total	-147	-3	0	-1.0			
2011	-147	-3	0	-1.0	CCTR Transf	To 2200-2406.000	FFIGUERO20131 031125050277
IT Employee Transfer from SDGE to SCG as of 2013							
2011 Total	-147	-3	0	-1.0			
2012	-191	-6	0	-2.0	CCTR Transf	To 2200-2406.000	FFIGUERO20131 031125149367
IT Employee Transfer from SDGE to SCG as of 2013							
2012 Total	-191	-6	0	-2.0			

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
Witness: Stephen J. Mikovits
Category: B. Infrastructure
Category-Sub: 1. Infrastructure
Cost Center: 2100-3095.000 - NETORK COMMUNICATION SERVICES DIRECTOR

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

Note: Totals may include rounding differences.

APPENDIX C

SDG&E Responses to Data Requests

ORA Data Request: ORA-SDG&E-DR-052-PM1, Question 11

ORA DATA REQUEST
ORA-SDG&E-DR-052-PM1
SDG&E 2016 GRC – A.14-11-003
SDG&E RESPONSE
DATE RECEIVED: JANUARY 26, 2015
DATE RESPONDED: FEBRUARY 9, 2015

11. Regarding SDG&E's response to SDG&E_Reponse_DEF-001-B, please update the Excel file to include the following information:
- a. O&M decreases, including explanations for decreases.
 - b. Accounts where forecast has no change from recorded 2013 to TY2016.
 - c. A column with TY2016 total by account.

SDG&E Response 11:

Please see ORA-SDG&E-DR-052-PM1 Q11 Attachment.xlsx

SDG&E DR-052 Q.11
SDG&E Forecast Adjustments Provided in Response to DEF-002-PM1

Work paper	Category	Work paper Name	Description	2013 Recorded	2014 adj.	2015 adj.	2016 adj.	2016 Total (Item c)	Assumptions	O&M Reductions (item a)
1IT001.000	Applications	IT Applications NSS	Cisco replacement Operating and Maintenance Business Case Preparation.	12,993	200	300	2,000	14,993	Assumes 6 to 10 contractors would backfill for internal Subject Matter Experts (SMEs) assigned to core project team. Assumes non-negotiated vendor pricing for 3rd party consultants to assist core project team.	
1IT001.000	Applications	IT Applications NSS	2014 Costs align with contractual forecasts, 2015-2016 escalated by 8% due to contracts or agreements coming off warranty and expanding support and services.		479	646	827	827	2014 adjustment to current contractual obligations. 2015 & 2016 escalation based upon a combination of historical averages, warranty expirations, and business-driven growth.	
1IT001.000	Applications	IT Applications NSS	Backfills and IT associates and CPD support Powerkz Support Systems Analyst		-	347	694	694	6.3 FTEs at \$100k plus \$10k per employee in associated NL costs, added across 2015 and 2016	
1IT001.000	Applications	IT Applications NSS	Organic IT growth to support expanding programs, applications, & infrastructure		-	143	286	286	2.25 incremental FTEs to support new IT initiatives across the company in 2015 and in 2016. Assumes 56% O&C ratio and \$100k average salary plus \$10k per employee (2 employees) in associated NL costs.	
1IT002.000	Infrastructure	IT Infrastructure NSS		223	-	-	-	223	No change from 2013 recorded	
1IT003.000	IT Support	IT Support NSS	Full year salary for 2 employees and NonLabor related to the capital business optimization program	1,068	1,083	(417)	(417)	651	Capital Business Optimization Program - one-time increase of \$1,000k from base year in 2014, then decreases by \$500k from base year in 2015 and 2016 for consulting services. Labor support - Program started mid way through 2013, therefore incremental \$83k to cover annual O&M spend for 2 employees, assuming an O&C ratio of 73%, which continues into 2015 and 2016.	Non-recurring consulting charges to support the capital business optimization group in 2014 result in a forecast reduction of 417k.
1IT004.000	Information Security	IT Security NSS		159	-	-	-	159	No change from 2013 recorded	
				14,443	1,762	1,019	3,390	17,833		

Cost Center	Category	Cost Center Name	Description	2013 Recorded	2014 adj.	2015 adj.	2016 adj.	2016 Total (Item c)	Assumptions	O&M Reductions (item a)
2100-3623	Applications	SHARED SOFTWARE DEVELOPMENT CONTRACTS	GIS system software and data maintenance costs	4,954	-	-	2,314	7,268	Contractual Obligation to support GIS system software. These costs were previously recorded in 2013 and forecasted in 2014-2015 in Electric Operations.	
2100-3623	Applications	SHARED SOFTWARE DEVELOPMENT CONTRACTS	IT Contract cost escalations or agreements coming off warranty	-	-	396	824	824	8% escalation in 2015 & 2016 based upon a combination of historical averages, warranty expirations, and business-driven growth.	
2100-3091	Applications	SOFTWARE DEV - DATABASE ADMINISTRATOR	Oracle database maintenance cost increases due to the current ULA expiration	4,368	-	-	1,000	5,368	Estimated contractual obligation to support Oracle database software	
2100-3091	Applications	SOFTWARE DEV - DATABASE ADMINISTRATOR	Transfer in from other cost center and IT Contract cost escalations or agreements coming off warranty and expanding support and services	-	-	349	727	727	8% escalation in 2015 & 2016 based upon a combination of historical averages, warranty expirations, and business-driven growth.	
2100-3087	Applications	UTILITY OPS SW DEVELOP SERVICES DIRECTOR	1 admin support and 2 CRM 1 CEN and SPP roll off and multiple capital projects beginning in 2015 and continuing into 2016	402	-	434	867	1,269	7.9 O&M FTEs at \$100k per employee and \$10k per employee in associated NL costs (8 employees) split across 2015 and 2016. Support includes 1 admin, 2 CRM developers, 1 CEN developer, 3 SPP analysts, and an additional FTE supporting additional production systems implemented via recently completed capital projects.	
2100-3087	Applications	UTILITY OPS SW DEVELOP SERVICES DIRECTOR	Organic IT growth to support expanding programs, applications, & infrastructure.	-	-	211	422	422	2.9 incremental FTEs to support new IT initiatives across the company in 2015 and in 2016. Assumes 62% O&C ratio and \$100k average salary plus \$10k per employee (3 employees) in associated NL costs.	
2100-3102	Applications	INFRASTRUCTURE ENG & OPS DIRECTOR	increased capital work and 3 software developers hired between 2015-2016	287	-	214	429	716	3.9 incremental FTEs to support 3 software developers and 1 other FTE supporting recently completed capital projects in 2015 and in 2016. Assumes 97% O&C ratio and \$100k average salary plus \$10k per employee (4 employees) in associated NL costs.	
2100-3102	Applications	INFRASTRUCTURE ENG & OPS DIRECTOR	Organic IT growth to support expanding programs, applications, & infrastructure.	-	-	204	408	408	2.8 incremental FTEs to support new IT initiatives across the company in 2015 and in 2016. Assumes 66% O&C ratio and \$100k average salary plus \$10k per employee (3 employees at \$10k in 2015 and 2 employees at \$10k in 2016) in associated NL costs.	
2100-4001	Applications	Collaboration Services	Dedicated Microsoft engineering services.	479	-	175	175	654	Estimated annual cost of professional services contracted through Microsoft for implementing incremental SharePoint tools and features.	
2100-4001	Applications	Collaboration Services	1 employee from capital to operating expense	-	-	55	110	110	1 FTE at \$100k per employee and \$10k per employee in associated NL costs (1 employee) starting halfway through 2015 and into 2016 for production support of collaboration tools, including SharePoint.	

SDG&E DR-052 Q.11
SDG&E Forecast Adjustments Provided in Response to DEF-002-PM1

Work paper	Category	Work paper Name	Description	2013 Recorded	2014 adj.	2015 adj.	2016 adj.	2016 Total (Item c)	Assumptions	O&M Reductions (item a)
2100-4001	Applications	Collaboration Services	Organic IT growth to support expanding programs, applications, & infrastructure.	-	-	26	42	42	.15 new employees to support new IT initiatives across the company in 2014 and 2015. \$100k average salary plus \$10k per employee in associated NL costs.	
2100-3781	Information Security	IS Contracts	Information Security - pre-paid warranty expirations (Contract Costs)	507	363	663	703	1,210	2014 adjustment to current contractual obligations. 2015 adds additional 300k in IT security contracts to cover prepaid warranties that are expiring, and 2016 adds another \$40k to cover additional prepaid warranties that are expiring.	
2100-3781	Information Security	IS Contracts	Information Security - threat intelligence supporting risk mitigation and infrastructure protection	-	-	120	120	120	Assumes estimated annual cost for 3rd party vendor services averaging \$10K per week and \$25k for an annual maintenance agreement resulting from the related project implementation.	
2100-3775	Information Security	SECURITY OPERATIONS	Information Security - Annual vulnerability and penetration testing assessments on SDG&E/SCG Crit Infrastructure - consulting	1,429	-	350	400	1,829	Assumes estimated annual cost for 3rd party vendor services, based on approximately 35 man weeks per year @ \$10K per week in 2015, and 40 man weeks in 2016.	
2100-3775	Information Security	SECURITY OPERATIONS	Information Security - External forensics and investigation support - consulting	-	-	100	125	125	Assumes estimated annual cost for 3rd party vendor services, based on approximately 5 man weeks per year @ \$20K per week in 2015, and 6 man weeks in 2016.	
2100-3814	Information Security	SR DIRECTOR IT INFRASTRUCTURE	Organic IT growth to support expanding programs, applications, & infrastructure.	296	-	143	286	582	1.95 new employees to support new IT initiatives across the company in 2015 and in 2016. \$100k average salary plus \$10k per employee in associated NL costs.	
2100-3763	Information Security	DIRECTOR - INFORMATION SECURITY	Information Security - new non-capital security technology innovation and product evaluations - consulting	240	-	100	120	360	Assumes estimated annual cost for 3rd party vendor services.	
2100-3763	Information Security	DIRECTOR - INFORMATION SECURITY	Information Security - Specific InfoSec training courses and industry conferences.	-	-	80	100	100	Management estimate to cover cost of training courses and attendance at industry conferences for Information Security personnel, based on security training for 13 people @ \$6K per person in 2015 and 16 people in 2016. Per person costs are based on SANS Institute training costs @ avg \$5K per course combined with an avg of \$1K travel & expense.	
2100-3774	Information Security	SECURITY ENGINEERING	Information Security - New service offering based on cloud collaboration and data sharing services	875	-	120	120	995	Assumes estimated annual cost for 3rd party vendor services.	
2100-3101	Information Security	INFORMATION SECURITY	Information Security - Support for increased security awareness events, communication, and company training	223	-	50	50	273	Assumes estimated annual cost for communication materials to be used to support security awareness and education.	
2100-3494	Infrastructure	DISTRIBUTED CONTRACTS	Transfer in from reorg IT Contract cost escalations or agreements coming off warranty and expanding support and services	3,232	1,372	1,740	2,138	5,370	2014 adjustment to current contractual obligations. 2015 & 2016 escalation of 8% based upon a combination of historical averages, warranty expirations, and business-driven growth.	
2100-3106	Infrastructure	NETWORK/TELECOM SERVICES - SDG&E	Transfer in from other cost center and IT Contract cost escalations or agreements coming off warranty and expanding support and services	5,842	566	1,079	1,633	7,475	2014 adjustment to current contractual obligations. 2015 & 2016 escalation of 8% based upon a combination of historical averages, warranty expirations, and business-driven growth.	
2100-3495	Infrastructure	MAINFRAME CONTRACTS	Transfer in from other cost center and IT Contract cost escalations or agreements coming off warranty and expanding support and services	5,701	376	862	1,387	7,088	2014 adjustment to current contractual obligations. 2015 & 2016 escalation of 8% based upon a combination of historical averages, warranty expirations, and business-driven growth.	
2100-3095	Infrastructure	NETORK COMMUNICATION SERVICES DIRECTOR	9 Telcom SGCS SAP LINUX resources split over 2014 - 2015	166	-	264	527	693	4.8 FTE's at \$100k per year and \$10k per employee in associated NL costs, split across 2015 and 2016	
2100-3095	Infrastructure	NETORK COMMUNICATION SERVICES DIRECTOR	Organic IT growth to support expanding programs, applications, & infrastructure.	-	-	208	416	416	2.25 new employees to support new IT initiatives across the company in 2015 and in 2016. \$100k average salary plus \$10k per employee in associated NL costs.	
2100-3095	Infrastructure	NETORK COMMUNICATION SERVICES DIRECTOR	Network Strategy Development. Develop a five-year network strategy and migration plan to leverage emerging technologies for improved reliability and performance of our network environment.	-	-	150	150	150	Management estimate for average consulting engagement (4-6 months) to analyze networking capabilities across 80 manned and unmanned sites.	
2100-3900	Infrastructure	IT PORTFOLIO MANAGEMENT	Apptio business performance measurement system	95	357	357	357	452	Annual contract cost.	
2100-3900	Infrastructure	IT PORTFOLIO MANAGEMENT	Develop multi-year strategies for major application families	-	-	250	250	250	Management estimate for various consulting engagements (2-6 months) to analyze application roadmap options for potential capital investments in major applications. These engagements range from \$30 to \$250k each.	
2100-3900	Infrastructure	IT PORTFOLIO MANAGEMENT	1 Analyst and 1 Admin between 2015 - 2016	-	-	48	96	96	.9 FTE at \$100k for an admin position and an IT analyst. Also \$10k in associated NL costs for IT analyst only	

SDG&E DR-052 Q.11

SDG&E Forecast Adjustments Provided in Response to DEF-002-PM1

Work paper	Category	Work paper Name	Description	2013 Recorded	2014 adj.	2015 adj.	2016 adj.	2016 Total (Item c)	Assumptions	O&M Reductions (item a)
2100-3900	Infrastructure	IT PORTFOLIO MANAGEMENT	Organic IT growth to support expanding programs, applications, & infrastructure.	-	-	35	70	70	1.6 new employees to support new IT initiatives across the company in 2014 and 2015. \$100k average salary plus \$10k per employee in associated NL costs.	
2100-3698	Infrastructure	SERVICE DEVELOPMENT PROGRAM MANAGEMENT	Organic IT growth to support expanding programs, applications, & infrastructure.	(9)	-	133	266	257	1.5 new employees to support new IT initiatives across the company in 2015 and in 2016. \$100k average salary plus \$10k per employee in associated NL costs.	
2100-3698	Infrastructure	SERVICE DEVELOPMENT PROGRAM MANAGEMENT	3 to support conf room and messaging and IT communications hired between 2015 - 2016	-	-	106	212	212	1.9 FTE at \$100k per employee plus \$10k per employee in associated NL costs, split across 2015 and 2016	
2100-3856	Infrastructure	VOICE LEASED CIRCUITS	IT Contract cost escalations or agreements coming off warranty	900	169	255	347	1,247	2014 adjustment to current contractual obligations. 2015 & 2016 escalation of 8% based upon a combination of historical averages, warranty expirations, and business-driven growth.	
2100-3859	Infrastructure	SDGE PERSONAL OWNED DEVICE ALLOWANCE	IT Contract cost escalations or agreements coming off warranty	327	201	243	289	616	2014 adjustment to current contractual obligations. 2015 & 2016 escalation of 8% based upon a combination of historical averages, warranty expirations, and business-driven growth.	
2100-0207	Infrastructure	TELECOM FIELD VOICE - SDGE	IT network telecom GO 95 work Ensure telecommunications cabling is in compliance and safe per General Order 95 to limit our exposure to fines. Examples include poles, lines, underground facilities, and tower inspections.	2,317	270	270	270	2,587	Mandated costs, approximately \$15k per violation, and averaging 15-20 violations per year (18 x \$15k)	
2100-3501	Infrastructure	IT NETWORK HARDWARE SOFTWARE MAINTENANCE	IT Contract cost escalations or agreements coming off warranty	1,066	9	95	188	1,254	2014 adjustment to current contractual obligations. 2015 & 2016 escalation based upon a combination of historical averages, warranty expirations, and business-driven growth.	
2100-3884	Infrastructure	MGD SVC VOICE ENTERP	IT Contract cost escalations or agreements coming off warranty	888		71	148	1,036	2014 adjustment to current contractual obligations. 2015 & 2016 escalation of 8% based upon a combination of historical averages, warranty expirations, and business-driven growth.	
2100-3884	Infrastructure	MGD SVC VOICE ENTERP	Cost adjustments to 2014 department reorganization	-	2	2	2	2	department reorganizational changes \$2k NL adjustment	
2100-3855	Infrastructure	CLINT SERVICES MAINTENANCE & SUPPORT	IT Contract cost escalations or agreements coming off warranty	5,471	(957)	(596)	(206)	5,265	2014 adjustment to current contractual obligations. 2015 & 2016 escalation of 8% based upon a combination of historical averages, warranty expirations, and business-driven growth.	In 2014, a combination of contract renegotiation resulting in lower rates and elimination of contracts through efficiencies caused decreases in the O&M forecast.
2100-3099	Infrastructure	DESKTOP HARDWARE	Cost adjustments to 2014 department reorganization	596	(408)	(393)	(377)	219	2014 adjustment to current contractual obligations. 2015 & 2016 escalation of 8% based upon a combination of historical averages, warranty expirations, and business-driven growth.	In 2014, desktop support purchases and services were shifted from O&M to Capital (Win7 project), resulting in a decrease in O&M resource needs in 2014-2016
2100-3103	Infrastructure	CSC CONTRACT SERVICES	IT Contract cost escalations or agreements coming off warranty	12,114	(3,210)	(2,498)	(1,729)	10,385	2014 adjustment to current contractual obligations. 2015 & 2016 escalation of 8% based upon a combination of historical averages, warranty expirations, and business-driven growth.	In 2013, a reconciliation of historical charges was completed which resulted in a multi-year true-up of costs. This non-recurring cost was excluded from our forecast.
2100-3067	IT Miscellaneous	IT BUSINESS PLANNING & BUDGETS	1 MARP and Expanding employee training for 5 people per year	718	70	70	70	788	1FTE MARP (Managerial Accounting Rotation Program) and \$20k in non-labor to expand training for 5 employees within the Business Planning & Budgets department (\$4k per employee)	
2100-3807	IT Miscellaneous	ENTERPRISE FINANCIAL & OPS SOLUTION	CPD program cost adjustments moving to other cost centers	568	(35)	(35)	(35)	533	Reductions due to CPD cost center consolidation (see SCG WP-18, workgroup 2IT003)	This "reduction" in costs for SDG&E Non-Shared IT Support is attributed to the re-distribution of CPD costs across IT and business unit cost centers. As described in Mr. Olmsted's testimony (Ex. SCG-18, page CRO-14) and included here for convenience, "Through 2013, CPD O&M costs were recorded to SoCalGas IT cost centers. To provide better transparency to the ownership of the costs, adjustments were made to align IT-related costs to IT cost centers and align business-related costs to Gas Distribution cost centers. In order to achieve this cost realignment, historical costs through 2013 were transferred to Gas Distribution. This resulted in historical IT costs, including for base year 2013, essentially being zeroed out. Forecasts were then added back to IT cost centers that were in-line with the original plans to address IT-related CPD work. Business costs related to CPD are represented in workpapers sponsored by SoCalGas Gas Distribution witness Gina Orozco-Mejia (Ex. SCG-04-WP)."
2100-3064	IT Miscellaneous	VP INFORMATION TECHN		752	-	-	-	752	No change from 2013 recorded (item b)	
2100-3071	Applications	SAP ACCOUNTING & FIN		1,294	-	-	-	1,294	No change from 2013 recorded (item b)	
2100-3072	Applications	SUPPLY CHAIN & LOGIS		909	-	-	-	909	No change from 2013 recorded (item b)	
2100-3073	Applications	ENTERPRISE INTEGRATI		946	-	-	-	946	No change from 2013 recorded (item b)	
2100-3074	Applications	SSDS PROJECT OFFICE		290	-	-	-	290	No change from 2013 recorded (item b)	

SDG&E DR-052 Q.11

SDG&E Forecast Adjustments Provided in Response to DEF-002-PM1

Work paper	Category	Work paper Name	Description	2013 Recorded	2014 adj.	2015 adj.	2016 adj.	2016 Total (Item c)	Assumptions	O&M Reductions (item a)
2100-3076	Applications	CORPORATE SYSTEMS		1324	-	-	-	1,324	No change from 2013 recorded (item b)	
2100-3079	Applications	SCG CUSTOMER CARE PR		62	-	-	-	62	No change from 2013 recorded (item b)	
2100-3080	Applications	MAJOR MARKETS & CUST		19	-	-	-	19	No change from 2013 recorded (item b)	
2100-3082	Applications	SCG CUSTOMER INFORMA		51	-	-	-	51	No change from 2013 recorded (item b)	
2100-3083	Applications	SCG CUSTOMER FIELD		-2	-	-	-	(2)	No change from 2013 recorded (item b)	
2100-3086	Applications	CUSTOMER ASSISTANCE		853	-	-	-	853	No change from 2013 recorded (item b)	
2100-3088	Applications	SOFTWARE DEV - WORK		188	-	-	-	188	No change from 2013 recorded (item b)	
2100-3089	Applications	BUSINESS INTELLIGENC		993	-	-	-	993	No change from 2013 recorded (item b)	
2100-3093	Applications	SOFTWARE DEV - WORK		1016	-	-	-	1,016	No change from 2013 recorded (item b)	
2100-3096	Infrastructure	NETWORK ENGINEERING-		-	-	-	-	-	No change from 2013 recorded (item b)	
2100-3097	Infrastructure	CLIENT TECHNOLOGY &		852	-	-	-	852	No change from 2013 recorded (item b)	
2100-3098	Infrastructure	ENTERPRISE SERVER GR		34	-	-	-	34	No change from 2013 recorded (item b)	
2100-3100	Infrastructure	MIDDLEWARE AND INTER		1265	-	-	-	1,265	No change from 2013 recorded (item b)	
2100-3105	Infrastructure	STORAGE AND ADMINIS		14	-	-	-	14	No change from 2013 recorded (item b)	
2100-3107	Infrastructure	ENTERPRISE OPERATION		1132	-	-	-	1,132	No change from 2013 recorded (item b)	
2100-3317	IT Miscellaneous	IT ACCOUNT MANAGEMEN		604	-	-	-	604	No change from 2013 recorded (item b)	
2100-3334	Infrastructure	SERVER MANAGEMENT		838	-	-	-	838	No change from 2013 recorded (item b)	
2100-3335	Infrastructure	UNIX SERVER GROUP		51	-	-	-	51	No change from 2013 recorded (item b)	
2100-3498	Infrastructure	INFRASTRUCTURE PROGR		298	-	-	-	298	No change from 2013 recorded (item b)	
2100-3500	Infrastructure	IT NETWORK FIELD - L		319	-	-	-	319	No change from 2013 recorded (item b)	
2100-3502	Infrastructure	ENTERPRISE COMMAND C		1909	-	-	-	1,909	No change from 2013 recorded (item b)	
2100-3544	Infrastructure	WINTEL SERVER GROUP		38	-	-	-	38	No change from 2013 recorded (item b)	
2100-3548	Infrastructure	ENT SVC MGT & HELP D		236	-	-	-	236	No change from 2013 recorded (item b)	
2100-3682	Infrastructure	PROJECT MANAGEMENT O		321	-	-	-	321	No change from 2013 recorded (item b)	
2100-3683	Infrastructure	PROJECT IMPROVEMENT		1094	-	-	-	1,094	No change from 2013 recorded (item b)	
2100-3684	Infrastructure	SERVICE DELIVERY - N		422	-	-	-	422	No change from 2013 recorded (item b)	
2100-3699	IT Miscellaneous	SOLUTIONS ARCHITECTU		299	-	-	-	299	No change from 2013 recorded (item b)	
2100-3713	IT Miscellaneous	OPEX FIELD FORCE PRO		536	-	-	-	536	No change from 2013 recorded (item b)	
2100-3733	IT Miscellaneous	SVP & CITO		638	-	-	-	638	No change from 2013 recorded (item b)	
2100-3754	Applications	CUSTOMER CARE PROJEC		6	-	-	-	6	No change from 2013 recorded (item b)	
2100-3762	IT Miscellaneous	IT OPEX ENTERPRISE T		174	-	-	-	174	No change from 2013 recorded (item b)	
2100-3817	Applications	INFO SECURITY PROG		18	-	-	-	18	No change from 2013 recorded (item b)	
2100-3824	Infrastructure	INFRASTR PRGRM OFFICE		217	-	-	-	217	No change from 2013 recorded (item b)	
2100-3835	Infrastructure	SDGE NETWRK INTEGRA		17	-	-	-	17	No change from 2013 recorded (item b)	
2100-3842	IT Miscellaneous	IT ASSOCIATE PROGRAM		1019	-	-	-	1,019	No change from 2013 recorded (item b)	
2100-3843	Infrastructure	SCG NETWORK INTEGRAT		1	-	-	-	1	No change from 2013 recorded (item b)	
2100-3846	Applications	SCG APPS MAJOR MARKE		6	-	-	-	6	No change from 2013 recorded (item b)	
2100-3848	Applications	CUSTOMER ANALYTICS S		130	-	-	-	130	No change from 2013 recorded (item b)	
2100-3885	Infrastructure	VOICE ENTERP SUPPORT		430	-	-	-	430	No change from 2013 recorded (item b)	
2100-3888	Infrastructure	CLIENT TECH SVCS		326	-	-	-	326	No change from 2013 recorded (item b)	
2100-3905	Applications	2100-3905		18	-	-	-	18	No change from 2013 recorded (item b)	
2100-4003	Infrastructure	IT Communications		91	-	-	-	91	No change from 2013 recorded (item b)	
				76,102	(855)	6,506	15,811	91,913		
Total SDG&E				90,545	907	7,525	19,201	109,746		

APPENDIX D

EX- SDG&E-19-WP-R-Amended

Workpaper 1IT001.000 – IT Applications NSS, pages 5 - 13

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

Beginning of Workpaper
1IT001.000 - IT Applications NSS

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

Area: INFORMATION TECHNOLOGY
 Witness: Stephen J. Mikovits
 Category: A. Applications
 Category-Sub: 1. Applications
 Workpaper: 1IT001.000 - IT Applications NSS

Activity Description:

This work group represents all the non-shared application costs for SDG&E, including customer care, SDGE field operations development, and other SDGE non-shared applications and related support.

Forecast Explanations:

Labor - Base YR Rec

This method is most appropriate because the base year most accurately represents the current state of the IT workpapers. Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another.

Non-Labor - Base YR Rec

This method is most appropriate because the base year most accurately represents the current state of the IT workpapers. Historical costs have fluctuated between various workgroups as a result of either internal organizational changes, transfers of responsibilities, or shifting of cost drivers from one area of the IT department to another.

NSE - Base YR Rec

NA

Summary of Results:

		In 2013\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
		2009	2010	2011	2012	2013	2014	2015	2016	
Years										
Labor	7,243	7,042	6,499	8,225	8,705	8,805	9,739	10,772		
Non-Labor	2,268	2,094	2,157	2,459	3,774	4,353	4,610	6,381		
NSE	0	0	0	0	0	0	0	0		
Total	9,510	9,136	8,656	10,684	12,479	13,158	14,349	17,153		
FTE	76.3	75.6	71.5	90.2	90.7	91.7	101.0	111.3		

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
Witness: Stephen J. Mikovits
Category: A. Applications
Category-Sub: 1. Applications
Workpaper: 1IT001.000 - IT Applications NSS

Forecast Summary:

In 2013 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2014	2015	2016	2014	2015	2016	2014	2015	2016
Labor	Base YR Rec	8,705	8,705	8,705	100	1,034	2,067	8,805	9,739	10,772
Non-Labor	Base YR Rec	3,774	3,774	3,774	579	836	2,607	4,353	4,610	6,381
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		12,479	12,479	12,479	679	1,870	4,674	13,158	14,349	17,153
FTE	Base YR Rec	90.7	90.7	90.7	1.0	10.3	20.6	91.7	101.0	111.3

Forecast Adjustment Details:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2014	100	100	0	200	1.0	1-Sided Adj

Operating and Maintenance expenses related to CISCO replacement Business Case Preparation.

Assumes 6 to 10 contractors would backfill for internal Subject Matter Experts (SMEs) assigned to core project team. Assumes non-negotiated vendor pricing for 3rd party consultants to assist core project team.

2014	0	479	0	479	0.0	1-Sided Adj
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2014 adjustment to current contractual obligations. 2015 & 2016 escalation based upon a combination of historical averages, warranty expirations, and business-driven growth.

IT contract costs, including maintenance agreements, network services, client support services, and other contracts are anticipated to escalate by approximately 8% per year in 2015 and 2016, based on expanding services, warranty expiration, and vendor cost escalations.

2014 Total	100	579	0	679	1.0	
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2015	123	20	0	143	1.2	1-Sided Adj
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2.25 incremental FTEs to support new IT initiatives across the company in 2015 and in 2016. Assumes 56% O&C ratio and \$100k average salary plus \$10k per employee (2 employees) in associated NL costs.

Incremental Employee requirements were estimated to be 15 headcount across the IT Division in 2015 and 2016. These 15 added employees are needed to support business growth and client IT support needs. The 15 headcount were prorated based upon 2013 spend by individual IT department and average O&C labor ratio for the base year.

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
 Witness: Stephen J. Mikovits
 Category: A. Applications
 Category-Sub: 1. Applications
 Workpaper: 1IT001.000 - IT Applications NSS

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adi Type</u>
2015	317	30	0	347	3.2	1-Sided Adj

6.3 FTEs at \$100k plus \$10k per employee in associated NL costs, added across 2015 and 2016.

4 FTEs for primary & secondary support positions for CPD and Powerworks, (2 headcount each, 100% O&C labor ratio). The remaining 2.3 FTEs are estimated to support the expansion of the IT Associate program (6 headcount, 38% O&C labor ratio).

2015	200	100	0	300	2.0	1-Sided Adj
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Operating and Maintenance expenses related to CISCO replacement Business Case Preparation.

Assumes 6 to 10 contractors would backfill for internal Subject Matter Experts (SMEs) assigned to core project team. Assumes non-negotiated vendor pricing for 3rd party consultants to assist core project team.

2015	0	646	0	646	0.0	1-Sided Adj
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2014 adjustment to current contractual obligations. 2015 & 2016 escalation based upon a combination of historical averages, warranty expirations, and business-driven growth.

IT contract costs, including maintenance agreements, network services, client support services, and other contracts are anticipated to escalate by approximately 8% per year in 2015 and 2016, based on expanding services, warranty expiration, and vendor cost escalations.

2015	394	40	0	434	3.9	1-Sided Adj
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7.9 O&M FTEs at \$100k per employee and \$10k per employee in associated NL costs (8 employees) split across 2015 and 2016. Support includes 1 admin, 2 CRM developers, 1 CEN developer, 3 SPP analysts, and an additional FTE supporting additional production systems implemented via recently completed capital projects.

2015 Total	1,034	836	0	1,870	10.3	
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2016	123	20	0	143	1.2	1-Sided Adj
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Note: Totals may include rounding differences.

San Diego Gas & Electric Company
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Non-Shared Service Workpapers

Area: INFORMATION TECHNOLOGY
Witness: Stephen J. Mikovits
Category: A. Applications
Category-Sub: 1. Applications
Workpaper: 1IT001.000 - IT Applications NSS

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
<p>2.25 incremental FTEs to support new IT initiatives across the company in 2015 and in 2016. Assumes 56% O&C ratio and \$100k average salary plus \$10k per employee (2 employees) in associated NL costs.</p> <p>Incremental Employee requirements were estimated to be 15 headcount across the IT Division in 2015 and 2016. These 15 added employees are needed to support business growth and client IT support needs. The 15 headcount were prorated based upon 2013 spend by individual IT department and average O&C labor ratio for the base year.</p>						
2016	634	60	0	694	6.3	1-Sided Adj
<p>6.3 FTEs at \$100k plus \$10k per employee in associated NL costs, added across 2015 and 2016.</p> <p>4 FTEs for primary & secondary support positions for CPD and Powerworks, (2 headcount each, 100% O&C labor ratio). The remaining 2.3 FTEs are estimated to support the expansion of the IT Associate program (6 headcount, 38% O&C labor ratio).</p>						
2016	123	20	0	143	1.2	1-Sided Adj
<p>2.25 incremental FTEs to support new IT initiatives across the company in 2015 and in 2016. Assumes 56% O&C ratio and \$100k average salary plus \$10k per employee (2 employees) in associated NL costs.</p> <p>Incremental Employee requirements were estimated to be 15 headcount across the IT Division in 2015 and 2016. These 15 added employees are needed to support business growth and client IT support needs. The 15 headcount were prorated based upon 2013 spend by individual IT department and average O&C labor ratio for the base year.</p>						
2016	400	1,600	0	2,000	4.0	1-Sided Adj
<p>Operating and Maintenance expenses related to CISCO replacement Business Case Preparation.</p> <p>Assumes 6 to 10 contractors would backfill for internal Subject Matter Experts (SMEs) assigned to core project team. Assumes non-negotiated vendor pricing for 3rd party consultants to assist core project team.</p>						
2016	0	827	0	827	0.0	1-Sided Adj
<p>2014 adjustment to current contractual obligations. 2015 & 2016 escalation based upon a combination of historical averages, warranty expirations, and business-driven growth.</p> <p>IT contract costs, including maintenance agreements, network services, client support services, and other contracts are anticipated to escalate by approximately 8% per year in 2015 and 2016, based on expanding services, warranty expiration, and vendor cost escalations.</p>						

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
 Witness: Stephen J. Mikovits
 Category: A. Applications
 Category-Sub: 1. Applications
 Workpaper: 11T001.000 - IT Applications NSS

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>Total</u>	<u>FTE</u>	<u>Adj Type</u>
2016	787	80	0	867	7.9	1-Sided Adj

7.9 O&M FTEs at \$100k per employee and \$10k per employee in associated NL costs (8 employees) split across 2015 and 2016. Support includes 1 admin, 2 CRM developers, 1 CEN developer, 3 SPP analysts, and an additional FTE supporting additional production systems implemented via recently completed capital projects.

2016 Total	2,067	2,607	0	4,674	20.6	
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Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
Witness: Stephen J. Mikovits
Category: A. Applications
Category-Sub: 1. Applications
Workpaper: 11T001.000 - IT Applications NSS

Determination of Adjusted-Recorded (Incurred Costs):

	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)
Recorded (Nominal \$)*					
Labor	5,509	5,457	5,581	7,107	7,534
Non-Labor	2,047	1,931	2,073	2,641	4,265
NSE	0	0	0	0	0
Total	7,556	7,388	7,654	9,748	11,799
FTE	62.5	62.0	62.9	79.0	77.4
Adjustments (Nominal \$)**					
Labor	269	255	-139	-75	-20
Non-Labor	5	7	3	-220	-492
NSE	0	0	0	0	0
Total	274	262	-136	-295	-512
FTE	2.9	2.5	-1.5	-1.3	-0.2
Recorded-Adjusted (Nominal \$)					
Labor	5,778	5,713	5,442	7,032	7,513
Non-Labor	2,052	1,938	2,076	2,421	3,774
NSE	0	0	0	0	0
Total	7,829	7,650	7,518	9,453	11,287
FTE	65.4	64.5	61.4	77.7	77.2
Vacation & Sick (Nominal \$)					
Labor	892	909	802	1,019	1,192
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	892	909	802	1,019	1,192
FTE	10.9	11.2	10.1	12.6	13.5
Escalation to 2013\$					
Labor	573	420	255	174	0
Non-Labor	216	156	81	38	0
NSE	0	0	0	0	0
Total	789	576	336	212	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2013\$)					
Labor	7,243	7,042	6,499	8,225	8,705
Non-Labor	2,268	2,094	2,157	2,459	3,774
NSE	0	0	0	0	0
Total	9,510	9,136	8,656	10,684	12,479
FTE	76.3	75.7	71.5	90.3	90.7

* After company-wide exclusions of Non-GRC costs

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

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
Witness: Stephen J. Mikovits
Category: A. Applications
Category-Sub: 1. Applications
Workpaper: 11T001.000 - IT Applications NSS

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs					
Years	2009	2010	2011	2012	2013
Labor	269	255	-139	-75	-20
Non-Labor	5	7	3	-220	-492
NSE	0	0	0	0	0
Total	274	262	-136	-295	-512
FTE	2.9	2.5	-1.5	-1.3	-0.2

Detail of Adjustments to Recorded:

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj_Type</u>	<u>From CCtr</u>	<u>RefID</u>
2009	304	3	0	3.8	CCTR Transf	From 2100-0019.000	CSCHRAMM2013 1107221220710
Transfer labor, FTE, and non-labor costs associated with IT Tech Support function from cost center 2100-0019 in Work Paper Group 100007 CCC Support to cost center 2100-0642 in Work Paper Group 11T001 Information Technology to align function where activity resides.							
2009	232	5	0	1.8	CCTR Transf	From 2100-3611.000	CSCHRAMM2013 1107221601690
Transfer labor, FTE, and non-labor costs associated with IT Tech Manager function from cost center 2100-0019 in Work Paper Group 100007 CCC Support to cost center 2100-0642 in Work Paper Group 11T001 Information Technology to align function where activity resides.							
2009	-35	-3	0	-0.4	1-Sided Adj	N/A	LBROUGH201311 05164557723
IT employee transfer from SDGE to SCG, 2IT001							
2009	-232	0	0	-2.3	1-Sided Adj	N/A	LBROUGH201312 04104017257
Transfer of 4 employees to SCG Gas Ops, Wkpaper 2SP000. 4 x 100k x 58% O&M = \$232k							
2009 Total	269	5	0	2.9			

2010	298	12	0	3.5	CCTR Transf	From 2100-0019.000	CSCHRAMM2013 1107221328560
Transfer labor, FTE, and non-labor costs associated with IT Tech Support function from cost center 2100-0019 in Work Paper Group 100007 CCC Support to cost center 2100-0642 in Work Paper Group 11T001 Information Technology to align function where activity resides.							

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
Witness: Stephen J. Mikovits
Category: A. Applications
Category-Sub: 1. Applications
Workpaper: 11T001.000 - IT Applications NSS

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From Cctr</u>	<u>RefID</u>
2010	226	6	0	1.7	CCTR Transf	From 2100-3611.000	CSCHRAMM2013 1107221705560
Transfer labor, FTE, and non-labor costs associated with IT Tech Manager function from cost center 2100-0019 in Work Paper Group 100007 CCC Support to cost center 2100-0642 in Work Paper Group 11T001 Information Technology to align function where activity resides.							
2010	-35	-3	0	-0.4	1-Sided Adj	N/A	LBROUGH201311 05164645730
IT employee transfer from SDGE to SCG, 2IT001							
2010	-232	0	0	-2.3	1-Sided Adj	N/A	LBROUGH201312 04104051257
Transfer of 4 employees to SCG Gas Ops, Wkpaper 2SP000. 4 x 100k x 58% O&M = \$232k							
2010	-2	-8	0	0.0	1-Sided Adj	N/A	TP1JMY20150526 131659140
Exclusion for Dynamic Pricing Refundable IOs per filing in Application 10-07-009.							
2010 Total	255	7	0	2.5			

2011	163	7	0	1.7	CCTR Transf	From 2100-0019.000	CSCHRAMM2013 1107221427490
Transfer labor, FTE, and non-labor costs associated with IT Tech Support function from cost center 2100-0019 in Work Paper Group 100007 CCC Support to cost center 2100-0642 in Work Paper Group 11T001 Information Technology to align function where activity resides.							
2011	6	0.506	0	0.1	CCTR Transf	From 2100-3611.000	CSCHRAMM2013 1107221831967
Transfer labor, FTE, and non-labor costs associated with IT Tech Manager function from cost center 2100-0019 in Work Paper Group 100007 CCC Support to cost center 2100-0642 in Work Paper Group 11T001 Information Technology to align function where activity resides.							
2011	-35	-3	0	-0.4	1-Sided Adj	N/A	LBROUGH201311 05164723943
IT employee transfer from SDGE to SCG, 2IT001							
2011	-232	0	0	-2.3	1-Sided Adj	N/A	LBROUGH201312 04104123227
Transfer of 4 employees to SCG Gas Ops, Wkpaper 2SP000. 4 x 100k x 58% O&M = \$232k							
2011	-42	-2	0	-0.6	1-Sided Adj	N/A	TP1JMY20150526 132906030
Exclusion for Dynamic Pricing Refundable IOs per filing in Application 10-07-009.							

Note: Totals may include rounding differences.

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

Area: INFORMATION TECHNOLOGY
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 Category-Sub: 1. Applications
 Workpaper: 1IT001.000 - IT Applications NSS

<u>Year/Expl.</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>	<u>From CCtr</u>	<u>RefID</u>
2011 Total	-139	3	0	-1.5			
2012	-35	-3	0	-0.4	1-Sided Adj	N/A	LBROUGH201311 05164848587
							IT employee transfer from SDGE to SCG, 2IT001
2012	-40	-3	0	-0.9	1-Sided Adj	N/A	LBROUGH201311 05165048623
							IT employee transfer from SDGE to SCG, 2200-2496
2012	0	-214	0	0.0	1-Sided Adj	N/A	TP1JMY20150526 133200817
							Exclusion for Dynamic Pricing Refundable IOs per filing in Application 10-07-009.
2012 Total	-75	-220	0	-1.3			
2013	-20	-492	0	-0.2	1-Sided Adj	N/A	TP1JMY20150526 133426037
							Exclusion for Dynamic Pricing Refundable IOs per filing in Application 10-07-009.
2013 Total	-20	-492	0	-0.2			

Note: Totals may include rounding differences.

APPENDIX E

SDG&E Responses to Data Requests

ORA Data Request: ORA-SDG&E-DR-069-PM1, Question 2

ORA DATA REQUEST
ORA-SDG&E-DR-069-PM1
SDG&E 2016 GRC – A.14-11-003
SDG&E RESPONSE
DATE RECEIVED: FEBRUARY 20, 2015
DATE RESPONDED: MARCH 9, 2015

2. Regarding the statement used throughout SDG&E-19-WP “2014 adjustment to current contractual obligations. 2015 & 2016 escalation based upon a combination of historical averages, warranty expirations, and business-driven growth. IT contract costs, including maintenance agreements, network services, client support services, and other contracts are anticipated to escalate by approximately 8% per year in 2015 and 2016, based on expanding services, warranty expiration, and vendor cost escalations.” Based on the above statement please provide the following (for each O&M expense historical and forecast please provide responses in nominal and base year 2013 \$):
- a. Yearly 2009-2013 recorded and 2014-2016 forecast O&M expenses for telecommunications contracts.
 - b. Yearly 2009-2013 recorded and 2014-2016 forecast O&M expenses for service contracts.
 - c. Recorded 2009-2013 and forecast 2014-2017 O&M expenses not included in responses to data requests ORA-SDG&E-027-PM1, Q. 2, SDG&E-052-PM1, Q.2, or items a and b above included in the “IT contract costs” forecast.
 - d. Please provide in Excel format all calculations SDG&E used in determining the forecast “8% per year in 2015 and 2016, based on expanding services, warranty expiration, and vendor cost escalations.”
 - e. Forecast O&M expenses for “IT contract costs” by cost center yearly 2014-2016 delineated by labor and non-labor.
 - f. Recorded O&M expenses for “IT contract costs” by cost center yearly 2009-2013 delineated by labor and non-labor.
 - g. Supporting documentation for each instance SDG&E used “2014 adjustment to current contractual obligations” in development of the O&M expense forecasts.
 - h. Identify if the “contractual obligation to support Oracle database software” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3091) is recorded as “IT contract costs.” If the answer is yes, please state so, if the answer is no, explain why these costs are not “IT contract costs.”
 - i. Identify if the “contractual obligation to support GIS system software” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3623) is recorded as “IT contract costs.” If the answer is yes, please state so, if the answer is no, explain why these costs are not “IT contract costs.”
 - j. Identify if the “professional services contracted through Microsoft for implementing incremental SharePoint tools and features” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-4001) are recorded as “IT contract costs.” If the answer is yes, please state so, if the answer is no, explain why these costs are not “IT contract costs.”
 - k. Identify if the “Information Security – pre-paid warranty expirations (Contract Costs)” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3781) are recorded as “IT contract costs.” If the answer is yes, please state so, if the answer is no, explain why these costs are not “IT contract costs.”

ORA DATA REQUEST
ORA-SDG&E-DR-069-PM1
SDG&E 2016 GRC – A.14-11-003
SDG&E RESPONSE
DATE RECEIVED: FEBRUARY 20, 2015
DATE RESPONDED: MARCH 9, 2015

Question 2 (Continued)

- l. Identify if the “Information Security – Annual vulnerability and penetration testing assessments on SDG&E/SCG Crit Infrastructure – consulting” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3781) are recorded as “IT contract costs.” If the answer is yes, please state so, if the answer is no, explain why these costs are not “IT contract costs
- m. Identify if “Apptio business performance measurement system” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3900) is recorded as “IT contract costs.” If the answer is yes, please state so, if the answer is no, explain why these costs are not “IT contract costs.”

SDG&E Response 02:

Questions 2.a – 2.c Please see Attachment ORA-SDG&E-DR-069-PM1 Q2a.

Question 2.d - Please see Attachment ORA-SDG&E-DR-069-PM1 Q2d.

Question 2.e – 2.f Please see Attachment ORA-SDGE-DR-069-PM1 Q2.e_f.

Question 2.g – SDG&E used an iterative process to review specific contract cost information and obtain management input regarding the most accurate 2014 forecast assumptions at that point in time (Q4, 2013). Intermediate versions of those documents are typically not retained and therefore supporting documentation for each instance where SDG&E used 2014 adjustments to current contractual obligations are not available. This process resulted in a forecasted reduction of \$1.2 million (3%) as compared to Base Year 2013 actuals.

Questions 2.h – Yes, “contractual obligation to support Oracle database software” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3091) is recorded as “IT contract costs.”

Questions 2.i - Yes, “Contractual obligation to support GIS system software” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3623) is recorded as “IT contract costs.”

Questions 2.j - Yes, “Professional services contracted through Microsoft for implementing incremental SharePoint tools and features” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-4001) are recorded as “IT contract costs.”

Questions 2.k- Yes, “Information Security – pre-paid warranty expirations (Contract Costs)” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3781) are recorded as “IT contract costs.”

**ORA DATA REQUEST
ORA-SDG&E-DR-069-PM1
SDG&E 2016 GRC – A.14-11-003
SDG&E RESPONSE
DATE RECEIVED: FEBRUARY 20, 2015
DATE RESPONDED: MARCH 9, 2015**

SDG&E Response 02 Continued :

Questions 2.l - Yes, “Information Security – Annual vulnerability and penetration testing assessments on SDG&E/SCG Crit Infrastructure – consulting” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3781) are recorded as “IT contract costs.”

Questions 2.m - Yes, “Apptio business performance measurement system” (data request ORA-SDG&E-052-PM1, Q.11 Cost Center 2100-3900) is recorded as “IT contract costs.”

ORA-SDG&E-DR-069-PM1 Q2 Amended Responses

Questions 2.a - 2.c

3/12/2015

There are no labor costs associated with any of the contracts listed below.

Contract Type	Question #	Unadjusted Historical Charges					Forecast		
		2009	2010	2011	2012	2013	2014	2015	2016
Hardware	2.c	5,752,677	4,826,821	5,608,555	4,735,128	4,271,907			
Other	2.c	437,335	342,076	687,114	453,278	276,756			
Services	2.b	10,412,040	10,035,864	10,183,389	10,160,735	13,725,344			
Software	(see note)	15,653,252	17,622,218	17,218,817	17,963,863	20,890,039			
Telecom	2.a	5,098,412	5,403,694	5,598,666	6,768,521	6,895,839			
		37,353,716	38,230,673	39,296,541	40,081,525	46,059,886	45,482	49,729	58,530

Note:

Software costs provided in DR 52 were from a different SAP database and are slightly different due to FERC ET and other adjustments.

For convenience, below is the difference between the prior submission for DR 52 and what is identified above:

	2009	2010	2011	2012	2013
Current DR (69)	15,653,252	17,622,218	17,218,817	17,963,863	20,890,039
Prior DR (52)	15,836,286	17,750,080	17,371,843	17,101,587	20,573,945
	(183,034)	(127,863)	(153,025)	862,276	316,095
Average difference					142,890

ORA-SDG&E-DR-069-PM1 Q2d Attachment

Please provide in Excel format all calculations SDG&E used in determining the forecast “8% per year in 2015 and 2016, based on expanding services, warranty expiration, and vendor cost escalations.”

Work Group	Description	IT Contract Costs based upon 8% escalation			
		2013	2014	2015	2016
1IT001.000	IT Applications NSS	1,613	2,092	2,259	2,440
2100-3091	SOFTWARE DEV - DATAB	2,788	2,976	3,402	3,471
2100-3099	DESKTOP HARDWARE	596	188	203	219
2100-3103	CSC CONTRACT SERVICE	12,114	8,904	9,616	10,385
2100-3106	NETWORK/TELECOM SERV	5,842	6,408	6,921	7,475
2100-3494	DISTRIBUTED CONTRACT	3,232	4,604	4,972	5,370
2100-3495	MAINFRAME CONTRACTS	5,701	6,077	6,563	7,088
2100-3501	IT NETWORK HARDWARE	1,066	1,075	1,161	1,254
2100-3623	SHARED SOFTWARE DEVE	4,954	4,954	5,350	5,778
2100-3855	CLINT SERVICES MAINT	5,471	4,514	4,875	5,265
2100-3856	VOICE LEASED CIRCUIT	900	1,069	1,155	1,247
2100-3859	SDGE PERSONAL OWNED	327	528	570	616
2100-3884	MGD SVC VOICE ENTERP	888	890	961	1,038
		45,492	44,279	48,008	51,646

Escalation rates		
2014	2015	2016
30%	8%	8%
7%	14%	2%
-68%	8%	8%
-26%	8%	8%
10%	8%	8%
42%	8%	8%
7%	8%	8%
1%	8%	8%
0%	8%	8%
-17%	8%	8%
19%	8%	8%
61%	8%	8%
0%	8%	8%
-3%	8%	8%

ORA-SDGE-DR-069-PM1 Q2e_f Attachment Amended Response

3/12/2015

Recorded and forecast O&M expenses for "IT contract costs" by cost center yearly 2014-2016 delineated by labor and non-labor.

2013\$ ('000)	Recorded 2.f.					Forecast 2.e.			
	GRC Wkp Grp Sub*	2009	2010	2011	2012	2013	2014	2015	2016
	1IT001.000					1,613	2,192	2,359	4,040
	2100-3091					2,788	2,788	3,137	4,515
	2100-3099	1,554	1,274	1,276	1,031	596	188	203	219
	2100-3103	11,091	10,424	10,190	9,927	12,114	8,904	9,616	10,385
	2100-3106	6,249	6,612	6,661	6,674	5,842	6,408	6,921	7,475
	2100-3494	9,889	9,839	8,996	6,649	3,232	4,604	4,972	5,370
	2100-3495	5,905	5,830	5,938	6,441	5,701	6,077	6,563	7,088
	2100-3501	3,508	2,486	2,852	1,130	1,066	1,075	1,161	1,254
	2100-3623	3,195	4,328	4,481	5,997	4,954	4,954	5,350	8,092
	2100-3781		637	1,027	830	507	870	1,290	1,330
	2100-3855				4,258	5,471	4,514	4,875	5,265
	2100-3856				413	900	1,069	1,155	1,247
	2100-3859				25	327	528	570	616
	2100-3884					888	890	961	1,038
	2100-3900						357	357	357
	2100-4001		90	90	409	64	64	239	239
	Grand Total	41,391	41,520	41,511	43,784	46,063	45,482	49,729	58,530

* All recorded and forecasted O&M costs for IT contract costs are non-labor.

APPENDIX F

SDG&E Responses to Data Requests

ORA Data Request: ORA-SDG&E-DR-052-PM1, Question 2

**ORA DATA REQUEST
 ORA-SDG&E-DR-052-PM1
 SDG&E 2016 GRC – A.14-11-003
 SDG&E RESPONSE
 DATE RECEIVED: JANUARY 26, 2015
 DATE RESPONDED: FEBRUARY 9, 2015**

2. Please provide the following delineated by the shared and non-shared services for all software contracts included in GRC recorded and forecast O&M expenses 2009-2016:
- a. Start date and expiration date.
 - b. Contract has option to expend service beyond the expiration date (yes or no).
 - c. Cost of contract by year (in nominal and base year 2013 dollars).
 - d. Total cost of software contracts by year (in nominal and base year 2013 dollars).
 - e. Type of contract (product contract, contract for the supply of products, contracts for the supply of services, or contract for the custom development (service) and supply of solutions/applications).

SDG&E Response 02:

The data to address this response was obtained through two separate internal systems. The SAP system contains the historical costs paid to software vendors and the Enterprise Contract Management (ECM) system contains the contract agreement with software vendors. The table represented in attachment ORA-SDG&E-DR-052-PM1 Q2 Attachment.xls represents combined information from these two systems in order to address answers to questions 2.a – 2.e.

For item 2.a, some software contracts, start date and expiration date are not available because the ECM system was upgraded in May, 2014. These are identified in the table as, “not avail.”

For item 2.e, SDG&E does not track contract types by the categories listed above. We have provided the following level of detail, using general ledger accounts:

SRV-DISTRIB SOFTWARE	Generally used for vendor contracts associated with software that runs on a variety of distributed server platforms.
SRV-MAINFRAME SOFTWR	Generally used for vendor contracts associated with software that runs on the enterprise server platforms.
SRV-SOFTWR MAINT&LSE	Generally used for vendor contracts associated with software that runs on other hardware platforms.

Non-Shared/ Shared	Vendor Name/ Accounting Adj.	PO / Contract	Start Date	End Date	Option to Extend?	Contract Type	Item 2.c - Nominal						Item 2.c - GRC 2013									
							Historical			Forecast*			Historical			Forecast*						
2.a	2.a	2.b	2.e	2009	2010	2011	2012	2013	2014	2015	2016	2009	2010	2011	2012	2013	2014	2015	2016			
Vendor 77	None	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE				201,212	38,214		-	-	-	197,792	38,214	-	-	-			
	5660020660	01/27/11	01/26/16	Yes	SRV-SOFTWR MAINT&LSE					39,104		-	-	-		39,104	-	-	-			
Vendor 78	5660017732	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE		63,000	63,832	56,814	66,261		-	58,836	61,438	55,848	66,261	-	-	-			
	None	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE			5,000				-	4,670	-	-	-	-	-	-			
Vendor 79	5660022504	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE	9,600	9,600	9,600				8,769	8,965	9,240	-	-	-	-	-			
Vendor 8	566007852	Not Avail	Not Avail	Yes	SRV-MAINFRAME SOFTWR	163,000	140,811	143,568	172,410			148,884	131,503	138,184	169,479	-	-	-	-			
Vendor 80	5660022109	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE			6,550	5,619			-	-	6,304	5,524	-	-	-	-			
Vendor 81	5660000174	Not Avail	Not Avail	Yes	SRV-MAINFRAME SOFTWR	74,473	76,709	83,642	88,728			68,024	71,639	80,505	87,220	-	-	-	-			
Vendor 82	5660000206	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE	19,762						18,050	-	-	-	-	-	-	-			
Vendor 83	5660007783	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE		13,792		12,641			-	12,880	-	12,426	-	-	-	-			
Vendor 84	None	Not Avail	Not Avail	Yes	SRV-MAINFRAME SOFTWR	95	95	95	95			87	89	91	93	-	-	-	-			
Vendor 85	5660026300	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE				51,592			-	-	-	50,715	-	-	-	-			
Vendor 86	5660017333	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE	202,294	105,010	68,225				184,775	98,069	65,667	-	-	-	-	-			
Vendor 87	566006343	08/09/95	08/08/15	Yes	SRV-MAINFRAME SOFTWR	28,000	28,000	28,000	28,000			25,575	26,149	26,950	27,524	-	-	-	-			
Vendor 88	5660028328	04/04/13	12/30/14	Yes	SRV-SOFTWR MAINT&LSE					248,604		-	-	-	-	248,604	-	-	-			
Vendor 89	566004424	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE	66,509		74,963	393			60,749	-	72,151	386	-	-	-	-			
	5660014377	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE	20,500						18,725	-	-	-	-	-	-	-			
	5660024881	01/19/12	01/18/17	Yes	SRV-SOFTWR MAINT&LSE				137,640	1,533		-	-	-	135,300	1,533	-	-	-			
	None	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE				2,363	7,782		-	-	-	2,323	7,782	-	-	-			
Vendor 9	None	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE	500	-	-				456	-	-	-	-	-	-	-			
Vendor 90	5660001682	05/19/05	08/31/15	Yes	SRV-DISTRIB SOFTWARE	227,414	132,807	79,114	69,499			207,720	124,028	76,147	68,318	-	-	-	-			
	5660001772	04/01/99	06/28/14	Yes	SRV-DISTRIB SOFTWARE			43,065		5,769		-	-	-	42,333	-	-	-	-			
	5660002969	09/30/05	06/29/14	Yes	SRV-DISTRIB SOFTWARE	35,813	29,828	35,813	41,380	17,505		32,712	27,856	34,470	40,677	17,505	-	-	-			
	5660016257	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE		85,560					-	79,904	-	-	-	-	-	-			
	5660019027	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE		200,000					-	186,780	-	-	-	-	-	-			
	5660026782	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE				74,740			-	-	-	73,470	-	-	-	-			
	None	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE	1,583,182	2,238,339	1,755,176	1,533,507	2,086,350		1,446,078	2,090,385	1,689,357	1,507,437	2,086,350	-	-	-			
Vendor 91	5660007623	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE	25,304	26,569					23,113	24,813	-	-	-	-	-	-			
	5660007623	Not Avail	Not Avail	Yes	SRV-MAINFRAME SOFTWR	(2,929)						(2,675)	-	-	-	-	-	-	-			
Vendor 92	None	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE	2,500	2,500	4,131	3,259	2,511		2,284	2,335	3,976	3,204	2,511	-	-	-			
Vendor 93	5660004086	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE	62,178						56,793	-	-	-	-	-	-	-			
Vendor 94	5660008292	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE	51,219						46,784	-	-	-	-	-	-	-			
Vendor 95	5660011856	04/01/08	04/28/15	Yes	SRV-SOFTWR MAINT&LSE				10,285			-	-	-	10,110	-	-	-	-			
Vendor 96	5660009519	07/30/07	01/26/15	Yes	SRV-DISTRIB SOFTWARE		3,657	3,657				-	3,415	3,520	-	-	-	-	-			
	5660009519	07/30/07	01/26/15	Yes	SRV-SOFTWR MAINT&LSE	5,600	42,983	40,227	42,050	36,800		5,115	40,142	38,718	41,335	36,800	-	-	-			
Vendor 97	5660015796	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE	44,876						40,989	-	-	-	-	-	-	-			
Vendor 98	5660001520	Not Avail	Not Avail	Yes	SRV-SOFTWR MAINT&LSE	103,646	108,830					94,670	101,636	-	-	-	-	-	-			
Vendor 99	5660016240	Not Avail	Not Avail	Yes	SRV-DISTRIB SOFTWARE		1,404					-	-	1,311	-	-	-	-	-			
Total (Item 2.d)							15,836,286	17,750,080	17,371,843	17,101,587	18,960,972	-	-	-	14,464,864	16,576,800	16,720,398	16,810,860	18,960,972	-	-	
Total (Item 2.d)							15,836,286	17,750,080	17,371,843	17,101,587	20,573,945	22,219,860	23,997,449	25,917,245	14,464,864	16,576,800	16,720,398	16,810,860	20,573,945	22,219,860	23,997,449	25,917,245

* Forecast was estimated by adding an 8% escalation rate to the total contract cost.

APPENDIX G

SDG&E Responses to Data Requests

ORA Data Request: ORA-SDG&E-DR-069-PM1, Question 7

**ORA DATA REQUEST
 ORA-SDG&E-DR-069-PM1
 SDG&E 2016 GRC – A.14-11-003
 SDG&E RESPONSE
 DATE RECEIVED: FEBRUARY 20, 2015
 DATE RESPONDED: MARCH 9, 2015
 REVISED RESPONSE: APRIL 14, 2015**

7. In response to data request ORA-SDG&E-052-PM1, Q.11, Cost Center 2100-3623, SDG&E states under assumptions “Contractual Obligation to support GIS system software. These costs were previously recorded in 2013 and forecasted in 2014-2015 in Electric Operations.” Based on this statement please identify in TY 2016 GRC testimony where SDG&E accounted for the transition of costs from Electric Operations to an IT cost center. Include Cost Center(s) and copies of testimony and WP’s supporting the transition of costs.

SDG&E Response 07:

Upon further review, it appears that the portion of GIS system software maintenance costs mentioned above was not transitioned out of the testimony and work papers of Electric Distribution, Exhibits SDG&E-10-R and SDG&E-10-WP-R. To correct this, Exhibit SDG&E-10-WP-R, work paper 1ED003.000 will be reduced by \$652,000 at the earliest opportunity.

Electric Distribution, Electric Transmission and SDG&E and SoCalGas Distribution Integrity Management Programs (DIMP) also recorded, or will record, a portion of the total GIS system software maintenance costs in 2013, 2014 and 2015. With the exception of Electric Distribution (as mentioned above), these business units did not forecast for the GIS system software maintenance licensing costs in 2016 in this GRC. A breakdown of the annual costs allocated to the four business units is shown in the following table.

As shown in IT’s workpaper 2100-3623 Shared Software Development Contracts, the total IT request for GIS software maintenance in 2016 is \$2.314 million. This cost will be transitioned over to IT from the four business units described above. The Electric Transmission FERC costs are part of a balancing/memorandum account and are not shown in any other witness area of this GRC.

GIS System Software Maintenance - In 2013 \$(000)						
Year	Electric Distribution	Electric Transmission (FERC)	SDG&E DIMP	SoCalGas DIMP	Information Technology	Total
2013	519	47	170	1,061	0	1,797
2014	587	52	204	1,272	0	2,115
2015	614	55	213	1,331	0	2,213
2016	0	0	0	0	2,314	2,314

Note: Electric Distribution is shown here with the correction described in the first paragraph of this response.