

Company: San Diego Gas & Electric Company (U902M)
Proceeding: 2016 General Rate Case
Application: A.14-11-003
Exhibit: SDG&E-26-R

REVISED

SDG&E

DIRECT TESTIMONY OF MARK A. DIANCIN

**SHARED SERVICES AND SHARED ASSETS
BILLING POLICIES AND PROCESS**

March 2015

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



A  Sempra Energy utility®

TABLE OF CONTENTS

- I. INTRODUCTION..... 1**
 - A. Summary of Proposals..... 1**
 - B. Support To/From Other Witnesses 1**
- II. SHARED SERVICE BILLINGS..... 2**
 - A. Overview of Shared Services Cost Presentation in This GRC 2**
 - 1. Policy 2**
 - 2. Shared Versus Non-Shared Services 2**
 - 3. Changes from the Prior GRC 3**
 - B. Shared Services Billing Process 3**
 - 1. Overview 3**
 - 2. Allocation of Shared Services Costs 3**
 - 3. Direct Allocation 4**
 - 4. Percentage Allocation 5**
 - C. Shared Services Billing Process 5**
 - 1. Compiling a Cost Center’s Shared Services Forecast 5**
 - 2. Loading of Overheads..... 9**
 - 3. Corporate Center Reallocation..... 9**
 - D. Overheads 10**
 - 1. Types of Overheads..... 10**
 - 2. SoCalGas Overheads 12**
 - 3. SDG&E Overheads..... 13**
 - 4. Overhead Credit..... 14**
 - E. Summary of Shared Services Costs..... 14**
 - 1. SoCalGas Forecasts 14**
 - 2. SDG&E Forecasts 21**
- III. SHARED ASSETS..... 26**
 - A. Shared Asset Policy Background..... 26**
 - B. Shared Asset Billing..... 27**
 - C. Description of Shared Asset Categories..... 30**
 - 1. Land 30**
 - 2. Structures and Improvements 30**

3. Computer Hardware and Software.....	30
4. Communications	31
5. Electric Communications	31
D. Summary.....	31
IV. CONCLUSION	33
V. WITNESS QUALIFICATIONS	34

LIST OF APPENDICES

APPENDIX - SHARED ASSET RATE BASE CALCULATIONS	MAD-A-1
LIST OF COMMONLY USED ACRONYMS.....	MAD-A-2
DEFINITIONS	MAD-A-3

1 **SDG&E DIRECT TESTIMONY OF MARK A. DIANCIN**

2 **SHARED SERVICES AND SHARED ASSETS BILLING POLICIES AND PROCESS**

3 **I. INTRODUCTION**

4 **A. Summary of Proposals**

5 I sponsor Test Year (“TY”) 2016 Shared Services Policy and Shared Assets Process testimony
6 for San Diego Gas & Electric Company (“SDG&E”). Shared services are activities permitted by the
7 Affiliate Transaction Rules decision, D.97-12-88, that are performed by SDG&E departments that are
8 designated as utility Shared Services departments (i.e., functional area) for the benefit of (i) SDG&E
9 or Southern California Gas Company (“SoCalGas”), (ii) Sempra Energy Corporate Center (“Corporate
10 Center”), and/or (iii) any unregulated subsidiaries. Shared Assets are assets that are on the financial
11 records of one utility, but also benefit other Sempra Energy affiliates.

12 The first section of this testimony: 1) describes SDG&E’s policy concerning the recovery of
13 Shared Services costs in this TY 2016 General Rate Case (“GRC”); 2) explains the Shared Services
14 billing process; and 3) summarizes the Shared Services book expenses for each utility. This testimony
15 serves as a resource to all Shared Services witnesses who are sponsoring Shared Services costs in their
16 testimony. The second section of this testimony presents an overview of the Shared Asset billing
17 process between SDG&E and the other Sempra Energy affiliates. This testimony includes examples of
18 the shared asset process and a list of proposed new future shared assets.

19 **B. Support To/From Other Witnesses**

20 In addition to sponsoring Shared Services costs, I also provide business or policy justification
21 for the following functional areas.

TABLE MAD-USS-1

Chapter Description Exhibit & Witness List		
Functional Area	SCG/SDG&E Exhibit	SCG/SDG&E Witness
Customer Service Field & Meter Reading	SCG-10/ SDG&E-13	Ms. Sara Franke
Customer Services-Information	SCG-12/ SDG&E-14	Ms. Ann Ayres / Mr. Brad Baugh
Customer Services -Office Operations	SCG-11/ SDG&E-14	Mr. Evan Goldman / Mr. Brad Baugh
Customer Service Technologies, Policies & Solutions	SCG-13/ SDG&E-14	Mr. Jeff Reed / Mr. Brad Baugh
Gas Engineering & Emergency Services	SCG-07/ SDG&E-06	Mr. Ray Stanford
Environmental	SCG-17/ SDG&E-18	Ms. Jill Tracy / Mr. Scott Pearson
Fleet Services & Facilities	SCG-15/ SDG&E-16	Ms. Carmen Herrera
Gas Distribution	SCG-04/ SDG&E-04	Mr. Frank Ayala
Gas Transmission	SCG-05/ SDG&E-05	Mr. John Dagg
Human Resources, Disability & Workers Comp, Safety	SCG-23/ SDG&E-24	Mr. Mark Serrano / Ms. Sarah Edgar
Information Technology	SCG-18/ SDG&E-19	Mr. Chris Olmsted / Mr. Stephen Mikovits
Real Estate	SCG-16/ SDG&E-17	Mr. Jim Seifert
Regulatory Affairs, Controller, Finance, Legal & External Affairs	SCG-24/ SDG&E-25	Mr. Ramon Gonzales / Mr. Ken Deremer
Risk Policy	SCG-02/ SDG&E-02	Ms. Diana Day
Supply Management & Supplier Diversity	SCG-14/ SDG&E-15	Mr. Rick Hobbs / Mr. Sydney Furbush
Electric Generation	SDG&E-11	Mr. Carl LaPeter

II. SHARED SERVICE BILLINGS

A. Overview of Shared Services Cost Presentation in This GRC

1. Policy

SoCalGas and SDG&E (the “utilities”) have the same policy for Shared Services billing. Pursuant to this policy, which complies with D.97-12-88, shared services costs that are incurred by one utility on behalf of the other utility, and/or on behalf of Sempra Energy or any of its unregulated subsidiaries, are allocated and billed to those companies receiving services. The ratepayers of the utility providing a Shared Service are not to subsidize the costs that are incurred in supporting the other utility.

2. Shared Versus Non-Shared Services

For purposes of this GRC, Shared Services are activities performed by a utility’s Shared Services Department (i.e., functional area) for the benefit of (i) SDG&E or SoCalGas, (ii) Corporate Center, and/or (iii) any unregulated subsidiaries.¹ The utility providing Shared Services allocates and bills incurred costs to the entity or entities receiving those services. “Non-Shared Services” are activities that are performed by a utility solely for its own benefit. As such, Non-Shared Services costs stay within the utility. Corporate Center provides certain services to the utilities and to other

¹ Where Shared Services costs are being shown as allocated out to Corporate Center, those costs will ultimately be allocated to SoCalGas, SDG&E, and the unregulated affiliates, in accordance with the Corporate Center reallocation methodology, which is described in Section C of this testimony.

1 subsidiaries. For purposes of the GRC, the utility treats costs for services received from Corporate
2 Center as Non-Shared Services costs, consistent with any other outside vendor costs incurred by the
3 utility. This is an important concept to understand when reading the testimonies of all the Shared
4 Services witnesses because only shared services are allocated and billed to those companies receiving
5 support.

6 **3. Changes from the Prior GRC**

7 For the TY 2016 GRC, the utilities are presenting Shared Services costs differently than in the
8 last TY 2012 GRC. Shared Services will use the ‘100% incurred’ view, rather than the ‘booked
9 expense’ view. This presentation of cost is consistent with the cost witnesses’ testimonies and shows
10 the costs incurred by the company rather than the costs booked by SDG&E.

11 **B. Shared Services Billing Process**

12 **1. Overview**

13 Each Shared Services functional area at SDG&E is responsible for determining the proper
14 allocation of its Shared Services costs to the appropriate entity or entities receiving the services. The
15 Shared Services billing process ensures: (1) sharing of services is recognized via a formal billing
16 process, (2) services are billed at fully-loaded cost,² and (3) supplemental loaders³ for applicable non-
17 regulated entities are applied to the billings. Due to the Shared Services billing process, ratepayers do
18 not subsidize costs that are incurred in support of another entity. However, to provide a complete
19 picture of Shared Services allocations and billing, those costs are presented to demonstrate that the
20 utilities are properly excluding those costs from book expense.

21 **2. Allocation of Shared Services Costs**

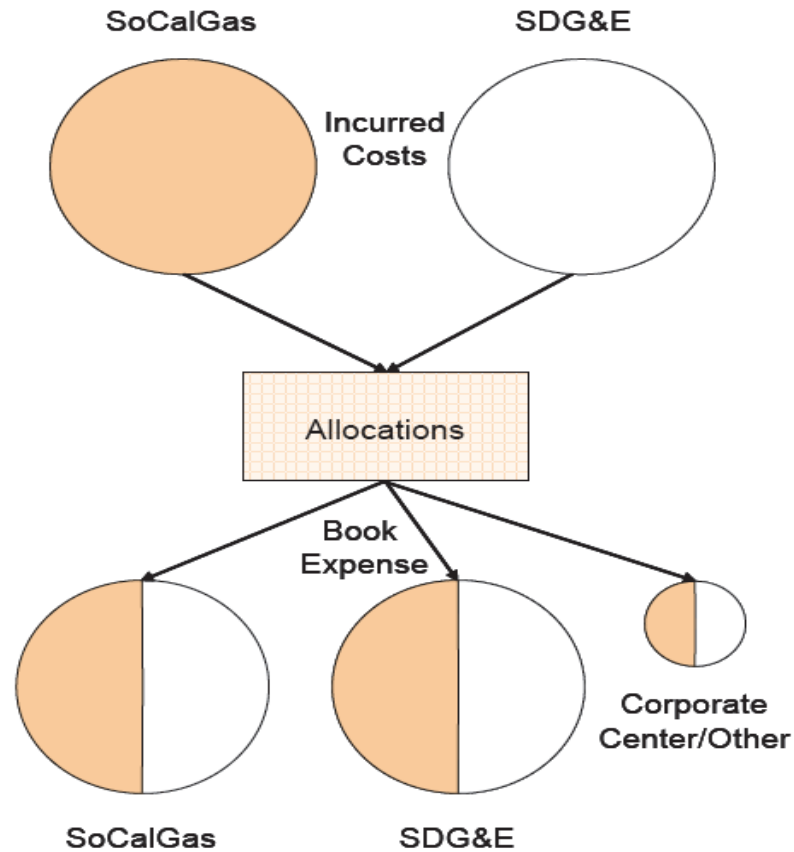
22 To facilitate proper billing of Shared Services costs to the entity or entities receiving a utility-
23 provided Shared Service, SDG&E first allocates those costs to the appropriate entity or entities, then
24 bills those costs out to the appropriate entity or entities.

25 The following chart illustrates, at a high level, how Shared Services costs are allocated:

² “Fully-loaded cost” means the direct cost of good or service plus all applicable indirect charges and overheads, as directed per D.97-12-88.

³ Pursuant to Rule V.H.5 of the CPUC’s Affiliate Transaction Rules, charges to Corporate Center and/or any of the unregulated affiliates will be calculated at fully-loaded cost, plus a premium on direct labor.

Shared Services Allocation Process



1

2 There are two primary allocation methods for allocating Shared Services costs: (1) direct
3 allocation and (2) percentage allocation. Each is discussed below.

4 3. Direct Allocation

5 Direct allocation is used for incurred costs that can be charged directly to an entity or entities
6 receiving the benefit of a Shared Service. When direct allocation applies, managers at the cost center⁴
7 level specifically identify and directly allocate a Shared Services activity. If certain Shared Services
8 are billed on a direct allocation method, the Affiliate Billing and Costing (“ABC”)⁵ organization will
9 open specific billing orders so that related costs can be captured directly and billed to the appropriate
10 affiliates.

⁴ The term “cost center” refers to the lowest level of organizational grouping within functions at SoCalGas and SDG&E.

⁵ The ABC organization provides services such as (i) guidance and support to the Shared Services functional areas on Shared Services billing requirements, (ii) maintaining the system allocation percentages for all shared O&M costs allocated from the cost centers in the SAP accounting system, and (ii) ensuring proper system coding for the application of appropriate overheads.

4. Percentage Allocation

Percentage Allocation is used for costs associated with activities that cannot be directly allocated. Most Shared Services costs are allocated under a percentage allocation method and are charged to the entity or entities receiving a Shared Service based on percentages derived under two types of analyses: (a) causal/beneficial or (b) multi-factor.

If Shared Services are billed via percentage allocation method, the Shared Services managers submit allocation percentages for each entity that receives charges from a utility for Shared Services rendered to the ABC organization. The ABC organization then inputs the allocation percentages into the Systems Applications and Products (“SAP”) accounting system, where they are processed and the resulting allocations billed as part of the month-end closing procedures. The allocation percentages are reviewed annually or more frequently when there are material changes to the Shared Services organization’s business condition. This review is the responsibility of the Shared Services functional areas. In addition, updates and retroactive adjustments are processed, as appropriate, to re-align the billing percentages when necessary.

(a) Causal-Beneficial

When costs cannot be directly allocated, they are charged using a Causal-Beneficial method, which is based on a “cost driver” such as Local Area Network Identification (“LAN ID”) count for Information Technology (“IT”). Causal-Beneficial methods are the most common basis for allocations by Shared Services organizations.

(b) Multi-factor

A four-factor analysis is performed for functions that cannot be appropriately defined by a single causal-beneficial cost driver. The Multi-Factor weights four factors: revenue, gross plant and investments, operating expenses, and full-time employees/equivalents (“FTEs”).

C. Shared Services Billing Process

1. Compiling a Cost Center’s Shared Services Forecast

SDG&E performs the following steps to forecast Shared Services costs for each cost center.

Step 1. The managers for the various utility Shared Services organizations forecast their direct costs⁶ by cost center as:

- Directly Retained;
- Directly Allocated; or
- Amounts Subject to Percent Allocation

⁶ Direct costs are defined as the specific labor and/or non-labor costs of each work activity.

1 Directly Retained costs represent costs incurred solely for a utility's own benefit, and therefore
2 these costs would be retained at that utility and not allocated out. Examples of Directly Retained costs
3 are outreach charges incurred by SDG&E to promote SDG&E-only products and services.

4 Directly Allocated costs represent costs incurred for special projects specifically for the benefit
5 of another affiliate, and therefore are directly charged to that affiliate.

6 Amounts Subject to Percentage Allocation costs represent Shared Services costs incurred for
7 Shared Services provided by one utility for the benefit of other entities (e.g. SDG&E for the benefit of
8 SoCalGas, Corporate Center and unregulated affiliates) and are allocated to entities based on their
9 share of the services received. Most of the Shared Services costs fall into this category.

10 **Step 2.** The Directly Retained, Directly Allocated and Amounts Subject to Percent Allocation
11 added to calculate the cost center's 100% level or Incurred Costs. The Shared Services cost center
12 forecast is presented in base year 2013 dollars and classified into labor, non-labor and non-standard
13 escalated costs,⁷ as applicable. A more detailed discussion is included in my work papers, Ex.
14 SDG&E-26_MDiancin_USS Policy_WP.

15 **Step 3.** With respect to Amounts Subject to Percentage Allocation, the managers determine by
16 cost center the allocation percentage to apply to each entity related to those costs.

17 **Step 4.** The allocation percentages derived in Step 3 above are applied to those costs to arrive
18 at costs allocable to each entity, except the utility providing the Shared Services. After all allocations
19 to the benefitting entities are made, the remaining costs, if any, are allocated to the utility providing
20 the Shared Services. These remaining costs are then treated in the same manner as Directly Retained
21 costs.

22 **Step 5.** All three types of costs (Directly Allocated, Directly Retained, Amounts Subject to
23 Percentage Allocation) are included to arrive at the following totals:

24 (i) Total Allocated amounts per entity, computed as the Directly Allocated
25 amounts plus the Amount Allocated via Percentage Allocation. This total is
26 presented at the entity level (e.g., SDG&E allocations to SoCalGas, Corporate
27 Center, and/or unregulated affiliates).

28 (ii) Total Retained amounts for each utility, computed as the Directly Retained
29 amounts plus the remaining dollars retained at the utility once Amounts Subject to
30 Percentage Allocation are allocated out to the other entities. This total can also be

⁷ Non-standard escalated costs are non-labor O&M expense estimates that are not subjected to escalation rates and are presented in nominal dollars.

1 derived by taking the 100% level forecast and subtracting the Total Allocated
2 amount, as computed in (i) above.

3 Table MAD-USS-2 below illustrates the preparation of the forecasting process described
4 above.

5 [Remainder of page intentionally left blank]

TABLE MAD-USS-2

Shared Service Billing Process Illustration							
Shared Service Cost Center 2200-XXXX							
Line No.	Description	Notes	Company	Labor	NonLabor	NSE	
1	100% Level Forecast	(a)	SCG	\$ 100	\$ 50	\$ -	Line [3+8+10]
2							
3	Directly Retained	(b)	SCG	\$ 5	\$ 5	\$ -	
4							
5	Directly Allocated	(c)	SDG&E	\$ 15	\$ 15	\$ -	
6			Corp Center	-	-	-	
7			Unregulated	-	-	-	
8			Subtotal	\$ 15	\$ 15	\$ -	Line [5+6+7]
9							
10	Amount Subject to % Allocation	(d)	SCG	\$ 80	\$ 30	\$ -	
11							
12							
13	AMOUNT ALLOCATED VIA % ALLOCATION CALCULATION:						
14	Amount Subject to % Allocation	(d)	SCG	80	30	-	Line [10]
15							
16	Allocation Percentages	(e)	SDG&E	50.0%	50.0%	0.0%	
17			Corp Center	10.0%	10.0%	0.0%	
18			Unregulated	0.0%	0.0%	0.0%	
19							
20							
21	Amount Allocated via % Allocation	(f)	SDG&E	\$ 40	\$ 15	\$ -	Line [14x16]
22			Corp Center	8	3	-	Line [14x17]
23			Unregulated	-	-	-	Line [14x18]
24			Total	\$ 48	\$ 18	\$ -	Line [21+22+23]
25							
26	Unallocated Amount Retained	(g)	SCG	\$ 32	\$ 12	\$ -	Line [14-24]
27							
28							
29	SUMMARY OF COSTS:						
30	Total Allocated	(h)	SDG&E	\$ 55	\$ 30	\$ -	Line [5+21]
31			Corp Center	8	3	-	Line [6+22]
32			Unregulated	-	-	-	Line [7+23]
33			Total	\$ 63	\$ 33	\$ -	Line [30+31+32]
34							
35	Total Retained	(i)	SCG - Direct	\$ 5	\$ 5	\$ -	Line [3]
36			SCG - Unallocated	32	12	-	Line [26]
37			Total	\$ 37	\$ 17	\$ -	Line [35+36]
38							
39			Grand Total	\$ 100	\$ 50	\$ -	Line [33+37] = Line 1
40							
41							
42							
43	Notes:						
44	(a) 100% Level Forecast = Sum of the Directly Retained, Directly Allocated and the Amount Subject to % Allocation. The						
45	total cost center costs prior to any allocations out.						
46	(b) Directly Retained = Costs incurred solely for SCG's own benefit and are not billed out.						
47	(c) Directly Allocated = Costs incurred for special projects benefiting a special affiliate and directly charged to the affiliate.						
48	(d) Amount Subject to % Allocation = Routine, on-going shared service costs incurred for SCG, SECC, unregulated						
49	affiliates and SDG&E itself.						
50	(e) Allocation Percentages = Determined by the planners and applied to each benefiting affiliate.						
51	(f) Amount allocated via % Allocation = Amount allocated to each affiliate.						
52	(g) Unallocated Amount Retained = The amount retained at SCG from the Subject to % Allocation amount.						
53	(h) Total Allocated = Directly Allocated amount + the Amount Allocated via % Allocation.						
54	(i) Total Retained = Directly Retained amount + the Unallocated Amount Retained.						

1 **Step 6.** To calculate the Book Expense, Total Retained is combined with the Billed-In costs
2 from the other utility.

3 **2. Loading of Overheads**

4 Consistent with the CPUC’s Affiliate Transaction Rules,⁸ Total Allocated amounts (also
5 referred to as allocations-out costs) for Shared Services include:

- 6 • Standard labor and non-labor overhead loadings;
- 7 • Supplemental labor loader, where applicable (the supplemental labor loader is
8 not applied to billings to SoCalGas and SDG&E); and
- 9 • Indirect support overhead loader.

10 These overheads are discussed in detail later in the next section of this testimony. The
11 overhead loading process consists of applying overheads to the Total Allocated amounts to yield fully-
12 loaded Total Allocated amounts. Overheads are not loaded onto Total Retained amounts. Labor
13 overheads are applied to the labor costs, and non-labor overheads are applied to both the non-labor and
14 non-standard escalated costs. Supplemental labor loaders are applied to labor costs, and Indirect
15 support overhead is applied to labor, non-labor and non-standard escalated costs.

16 **3. Corporate Center Reallocation**

17 SDG&E allocates Shared Services to Corporate Center based on the direct support of the
18 Shared Services organizations to Corporate Center. However, since Corporate Center supports the
19 utilities and other unregulated affiliates, these support costs are then reallocated back to those entities.
20 To avoid inefficiencies associated with affiliates allocating these costs to Corporate Center and then
21 Corporate Center allocating them back to the affiliates, SDG&E implemented a process to reallocate
22 Corporate Center charges to the receiving affiliate “on behalf” of Corporate Center based on the same
23 allocation percentages that Corporate Center derived for its allocations. The Corporate Reallocation,
24 also known as Business Unit Charge Ups (“BUCU”), allocation percentages are included in the table
25 below and the details can be found in the work papers supporting the testimony of SDG&E Corporate
26 Center witness Peter Wall (Ex. SDG&E-20).

27

⁸ See D.97-12-088 : Affiliate Transaction Rules.

Table MAD-USS-3

Calculation for 2016 Forecast									
Business Unit	2016 Budget (Labor) - \$ '000						Total	BU Allocations	
	Finance	Governance	Legal	Human Resources	External Affairs	Facilities/ Assets			
SDGE	\$ 6,809	\$ 2,734	\$ 2,181	\$ 702	\$ 513	\$ 7,345	\$ 20,283	A	31.4% A/Z
SoCal Gas	6,086	1,437	3,504	713	821	7,133	19,695	B	30.5% B/Z
Global Business Units	9,623	4,137	542	844	209	9,191	24,546	C	38.1% C/Z
Corporate Retained	1,403	1,154	51	813	209	3,021	6,651		
Total	\$ 23,921	\$ 9,462	\$ 6,278	\$ 3,073	\$ 1,752	\$ 26,689	\$ 71,175		100.0%
							\$ 64,524	Z	

D. Overheads

1. Types of Overheads

Overheads are applied to shared service billings to fully load the shared service cost. The following are the types of overheads applied to billings:

(a) Standard Labor Overheads

The standard labor overheads include:

- Payroll Tax;
- Variable Pay;⁹
- Workers’ Compensation (“Workers’ Comp”);
- Public Liability and Property Damage (“PLPD”); and
- Pension and Benefits (“P&B”).

These labor overheads represent additional indirect costs associated with salaries paid to employees and are loaded on internal labor and labor billed to other parties. The specific overhead rates that were applied to the shared service allocations-out costs in this GRC were developed using 2013 recorded data.

(i) Payroll Tax Overhead

The Payroll Tax overhead represents the SDG&E’s portion of required contributions to the State and Federal governments for State Unemployment Insurance, Federal Unemployment Insurance, and Federal Retirement and Medicare Insurance. The Payroll Tax rate applied to the allocations-out labor was provided by the Tax Department for use in this GRC. Further details on payroll taxes can be found in the testimony of SDG&E Tax witness Ragan Reeves (Ex. SDG&E-29).

⁹ Variable pay plans are commonly referred to as the Incentive Compensation Plan (“ICP”).

1 (ii) Variable Pay / ICP Overhead

2 The ICP overhead represents the variable pay plan costs paid to employees based on individual
3 employee and company performance as compared to pre-established goals. The ICP overhead rate
4 used in this GRC was applied to the total labor allocated to the affiliates. The ICP rate in this GRC
5 equals to the 2013 pool funding divided by the total 2013 non-union SDG&E labor. Further details on
6 ICP can be found in the testimony of SDG&E Compensation witness Debbie Robinson (Ex. SDG&E-
7 22).

8 (iii) Workers' Comp Overhead

9 The Workers' Comp overhead represents the cost of expected payments to employees for
10 work-related injuries, plus the cost of workers' compensation insurance premiums to cover claims
11 over a certain dollar amount. The Workers' Comp overhead rate used in this GRC was applied to the
12 total labor allocated out to the affiliates. The Workers' Comp rate in this GRC equals to the 2013 pool
13 funding divided by the total 2013 SDG&E labor. Further details on workers' compensation can be
14 found in the testimony of SDG&E Compensation witness Debbie Robinson (Ex. SDG&E-22).

15 (iv) PLPD Overhead

16 The PLPD overhead represents the cost of expected payments to third parties for liability and
17 property damage claims submitted to SDG&E, plus the cost of insurance premiums to cover claims
18 over a certain dollar limit. The PLPD overhead rate used in this GRC was applied to the total labor
19 allocated out to the affiliates. The PLPD rate in this GRC equals to the 2013 pool funding divided by
20 the total 2013 SDG&E labor. Further details on PLPD can be found in the testimony of SDG&E
21 Corporate Center-Insurance witness Katherine Carbon (Ex. SDG&E-21).

22 (v) P&B Overhead

23 The P&B overhead represents costs paid by SDG&E to provide employee benefits, such as
24 flex health benefit plans, employee pension contributions and expense, the company match portion of
25 contributions to the qualified retirement savings plan 401(k), and retiree health benefits. The P&B
26 overhead rate used in this GRC was applied to the total labor allocated out to the affiliates. The P&B
27 rate in this GRC application equals to the 2013 pool funding divided by the total 2013 SDG&E labor.
28 Further details on P&B can be found in the testimony of SDG&E Pension & PBOPs witness David
29 Sarkaria (Ex. SDG&E-23).

30 (vi) Vacation and Sick ("V&S")

31 The V&S overhead represents costs paid by SDG&E for the employees' non-productive time,
32 such as vacation and sick days, holidays and jury duty. For this GRC filing, V&S was forecasted as a
33 part of total direct labor instead of an indirect overhead loading. As a result, a V&S overhead

1 rate/factor was provided to the managers in order to gross up the productive labor. The V&S factor
2 used in this GRC filing was based on the 2013 historical rate.

3 **(b) Non-Labor Overheads**

4 The standard non-labor overheads consist solely of the Purchasing Overhead Rate. The
5 Purchasing overhead rate loads the costs related to the procurement activity in obtaining goods and
6 services for the organizations. The costs for any procurement activities benefiting the affiliates are
7 billed directly as part of the Shared Service billings. The Purchasing overhead rate used in this GRC
8 was applied to the non-labor charges (which generally represent purchased materials and services).
9 The Purchasing rate in this GRC equals to the 2013 pool funding divided by total 2013 SDG&E non-
10 labor charges.

11 **(c) Supplemental Labor Loader**

12 In addition to the standard labor loaders, a supplemental labor loader was applied to Shared
13 Services billed to Corporate Center and other unregulated affiliates. The applicable required loader
14 for these billings is 5% of fully-loaded labor. The supplemental labor overhead rate presented in
15 Tables MAD-USS-4 and Table MAD-USS-5 below reflects the required loading rate applied to direct
16 labor prior to any loading. This rate equates to the required loading rate of 5% on fully-loaded labor.

17 **(d) Indirect Support Overhead**

18 This indirect support is represented by the Affiliate Billing Administrative & General (“A&G”)
19 overhead. This overhead represents the cost of A&G support provided to all affiliate billings by
20 functional areas, such as Accounting and Human Resources. The Affiliate Billing A&G overhead
21 used in this GRC is applied to the total labor and non-labor allocations-out costs to the affiliates. The
22 Affiliate Billing A&G rate in this GRC equals to the 2013 pool funding divided by total 2013 labor
23 and non-labor costs billed to the affiliates.

24 **2. SoCalGas Overheads**

25 Composite overhead loading factors were developed based on 2013 recorded data and used to
26 calculate billed costs for applicable overheads for each affiliate. The 2016 loading factors are
27 presented in Table MAD-USS-4 below.

28 The use of an overhead rate based on recorded data in this GRC is a reasonable and fair
29 representation of TY 2016 loadings for shared service billings. There is no indication of stranded
30 costs or cross-subsidization at the utilities by using an overhead rate based on recorded data.

Table MAD-USS-4

2016 Composite Overhead Loading Factors for SCG			
	San Diego Gas & Electric Company	Sempra Energy Corporate Center	Unregulated Affiliates
Labor			
Standard	58.6%	58.6%	58.6%
Supplemental	-	7.9%	7.9%
Indirect Support	20.6%	20.6%	20.6%
Subtotal	79.2%	87.2%	87.2%
Non-Labor			
Standard Procurement	1.0%	1.0%	1.0%
Indirect Support	20.6%	20.6%	20.6%
Subtotal	21.6%	21.6%	21.6%

3. SDG&E Overheads

Composite overhead loading factors were developed based on 2013 recorded data and used to calculate billed costs for applicable overheads for each affiliate. The 2016 loading factors are presented in Table MAD-USS-5 below.

The use of an overhead rate based on recorded data in this GRC is a reasonable and fair representation of TY 2016 loadings for shared service billings. There is no indication of stranded costs or cross-subsidization at the utilities by using an overhead rate based on recorded data.

Table MAD-USS-5

2016 Composite Overhead Loading Factors for SDG&E			
	Southern California Gas Company	Sempra Energy Corporate Center	Unregulated Affiliates
Labor			
Standard	59.7%	59.7%	59.7%
Supplemental	-	8.0%	8.0%
Indirect Support	20.3%	20.3%	20.3%
Subtotal	80.0%	88.0%	88.0%
Non-Labor			
Standard Procurement	0.6%	0.6%	0.6%
Indirect Support	20.3%	20.3%	20.3%
Subtotal	20.9%	20.9%	20.9%

4. Overhead Credit

The Overhead credit is the total of all the overhead loadings that were applied to the Total Allocations amount (i.e., allocations-out costs). The overhead loadings were credited so as not to be counted for twice in SoCalGas' or SDG&E's revenue requirement. For example, SDG&E will reflect its P&B forecast costs at the 100% level. However, a portion of SDG&E's P&B costs that are related to SDG&E employees who provide Shared Services to other entities (SoCalGas, Corporate Center and other unregulated affiliates), are billed to those entities in the form of overhead loadings. This is so SDG&E ratepayers do not subsidize the portion of P&B costs related to services provided to other entities. As a result, a credit for SDG&E's P&B overhead loadings must be applied in the Results of Operation ("RO") model in order to reflect the proper request level for SDG&E's revenue requirement.

In contrast, the Payroll Tax and Supplemental Labor overhead loading was not considered an overhead credit to the RO model's O&M Summary. Unlike the other overhead loadings (e.g., P&B), the payroll taxes calculated in the Shared Service revenue requirement for SoCalGas and SDG&E were based on the Total Retained labor amount and not the 100% level labor forecast. Therefore, there is no need to credit the payroll tax overhead portion from the RO model for SoCalGas or SDG&E. The Supplemental Labor Loader was applied to Shared Services billed to Corporate Center and other unregulated affiliates. There was no forecasted cost related to this loader in the RO model. Therefore, it was also excluded from the overhead credit calculation.

E. Summary of Shared Services Costs

1. SoCalGas Forecasts

In the following section, Table MAD-USS-6, "SoCalGas Shared Services Summary (Direct Costs)" is presented by labor, non-labor and non-standard escalated and shows the details on the following amounts¹⁰, prior to overhead loadings:

- a) 100% level forecast by functional area - \$ 102,792;
- b) Allocations-out costs by functional area – \$ 15,258;
- c) Retained costs by functional area - \$ 87,534;
- d) Allocations-in costs by functional area - \$ 53,156; and
- e) Book Expense by functional area - \$ 140,690.

Table MAD-USS-7, "SoCalGas Overheads" shows the details on the following amounts, which are after overhead loadings:

- a) Allocations-out to SDG&E - \$ 23,517;

¹⁰ Presented in base year 2013 dollars and in thousands.

1 b) Allocations-out to Corporate Center - \$ 1,753; and

2 c) Allocations-out to Unregulated Affiliates - \$ 136.

3 Table MAD-USS-8, “SoCalGas Shared Services Summary (Retained and Allocations In)”

4 shows the details on the following amounts:

5 a) Retained costs by functional area - \$ 87,534;

6 b) Allocations-in (fully loaded) costs by functional area - \$ 75,038;

7 c) Overhead Credit - \$ (9,185); and

8 d) Net Shared Services O&M - \$ 153,387.

9 Finally, Table MAD-USS-9, “SoCalGas Corporate Reallocation Costs” shows the details on
10 the following amounts re-allocated from Corporate Center:

11 a) SDG&E - \$ 5,218;

12 b) SoCalGas - \$ 5,069; and

13 c) Unregulated Affiliates - \$ 6,332.

14 [Remainder of page intentionally left blank]

TABLE MAD-USS-6

SCG Shared Services Summary (Direct Costs)				
Test Year 2016				
(\$2013 Thousands)				
Incurred (100% Level Forecast)				
Functional Area	L	NL	NSE	Total
CS - Field & Meter Reading	2,275	131	-	2,407
CS - Information	3,083	315	-	3,398
CS - Office Operations	4,779	1,249	4	6,032
CS - Technologies, Policies & Solutions	4,192	3,950	-	8,143
Engineering, Emergency Services & Land	14,773	4,406	-	19,178
Environmental	2,066	1,402	-	3,468
Fleet & Facilities	1,157	2,322	-	3,479
Gas Distribution	3,434	4,476	-	7,910
Gas Transmission	4,233	1,058	-	5,292
HR, Disability, Workers Comp & Safety	1,786	263	-	2,048
Information Technology	14,068	1,916	-	15,984
Real Estate	-	-	16,423	16,423
Reg Aff/A&F/Legal/Ext Aff	5,856	583	-	6,440
Risk Management	807	1,785	-	2,592
Total	62,509	23,856	16,427	102,792
Allocations Out				
Functional Area	L	NL	NSE	Total
CS - Field & Meter Reading	220	12	-	231
CS - Information	520	24	-	543
CS - Office Operations	948	234	0	1,183
CS - Technologies, Policies & Solutions	389	228	-	617
Engineering, Emergency Services & Land	1,630	457	-	2,086
Environmental	34	23	-	58
Fleet & Facilities	71	357	-	427
Gas Distribution	546	453	-	998
Gas Transmission	533	124	-	657
HR, Disability, Workers Comp & Safety	218	33	-	252
Information Technology	5,013	617	-	5,630
Real Estate	-	-	769	769
Reg Aff/A&F/Legal/Ext Aff	1,463	147	-	1,610
Risk Management	197	-	-	197
Total	11,780	2,709	769	15,258
Retained				
Functional Area	L	NL	NSE	Total
CS - Field & Meter Reading	2,056	120	-	2,175
CS - Information	2,563	291	-	2,854
CS - Office Operations	3,831	1,014	4	4,849
CS - Technologies, Policies & Solutions	3,804	3,722	-	7,526
Engineering, Emergency Services & Land	13,143	3,949	-	17,092
Environmental	2,032	1,379	-	3,410
Fleet & Facilities	1,086	1,966	-	3,052
Gas Distribution	2,888	4,023	-	6,912
Gas Transmission	3,701	934	-	4,635
HR, Disability, Workers Comp & Safety	1,567	229	-	1,796
Information Technology	9,055	1,299	-	10,354
Real Estate	-	-	15,654	15,654
Reg Aff/A&F/Legal/Ext Aff	4,394	436	-	4,830
Risk Management	610	1,785	-	2,395
Total	50,729	21,147	15,658	87,534

TABLE MAD-USS-6 Continued

Allocations In				
Functional Area	L	NL	NSE	Total
CS - Information	61	18	-	78
CS - Operations, Information & Technologies	532	216	-	748
Engineering	78	2	-	79
Environmental	343	57	-	400
HR, Disability, Workers Comp & Safety	186	10	-	196
Information Technology	13,503	33,764	-	47,268
Real Estate, Land & Facilities	95	357	-	452
Reg Affairs, Controller, Finance, Legal & Ext Aff	2,229	432	-	2,662
Risk Management	395	31	-	426
Supply Management & Supplier Diversity	805	42	-	847
Total	18,227	34,929	-	53,156

Total Shared Service O&M				
Functional Area	L	NL	NSE	Total
CS - Field & Meter Reading	2,056	120	-	2,175
CS - Information	2,624	309	-	2,933
CS - Office Operations	4,364	1,230	4	5,598
CS - Technologies, Policies & Solutions	3,804	3,722	-	7,526
Engineering, Emergency Services & Land	13,221	3,951	-	17,171
Environmental	2,375	1,436	-	3,810
Fleet & Facilities	1,086	1,966	-	3,052
Gas Distribution	2,888	4,023	-	6,912
Gas Transmission	3,701	934	-	4,635
HR, Disability, Workers Comp & Safety	1,753	239	-	1,992
Information Technology	22,558	35,063	-	57,621
Real Estate	95	357	15,654	16,107
Reg Aff/A&F/Legal/Ext Aff	6,623	868	-	7,491
Risk Management	1,005	1,816	-	2,821
Supply Management & Supplier Diversity	805	42	-	847
Total	68,956	56,076	15,658	140,690

Note: "Allocations In" section have not been loaded. Loading for these costs will be shown in Table MAD-USS-8 SCG Shared Services Summary (Retained and Allocations In).

TABLE MAD-USS-7

SCG Overheads												
Test Year 2016												
(\$2013 Thousands)												
	(a)				(b) = (a)*Overhead Rates				(c)=(a)+(b)			
	Direct Costs				Overheads				Fully Loaded Costs			
	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
Retained	50,729	21,147	15,658	87,534	-	-	-	-	50,729	21,147	15,658	87,534
Allocations Out:												
SDG&E												
CS - Field & Meter Reading	220	12	-	231	174	3	-	177	394	14	-	408
CS - Information	328	24	-	351	260	5	-	265	588	29	-	616
CS - Office Operations	948	234	0	1,183	751	51	0	801	1,698	285	1	1,984
CS - Technologies, Policies & Solutions	389	228	-	617	308	49	-	357	697	278	-	975
Engineering, Emergency Services & Land	1,617	452	-	2,069	1,281	98	-	1,379	2,899	550	-	3,448
Environmental	34	23	-	57	27	5	-	32	61	28	-	89
Fleet & Facilities	60	320	-	380	47	69	-	116	107	389	-	496
Gas Distribution	546	453	-	998	432	98	-	530	978	550	-	1,529
Gas Transmission	533	124	-	657	422	27	-	449	955	151	-	1,106
HR, Disability, Workers Comp & Safety	142	10	-	151	112	2	-	114	254	12	-	266
Information Technology	4,587	562	-	5,149	3,634	121	-	3,755	8,221	683	-	8,904
Real Estate	-	-	592	592	-	-	128	128	-	-	720	720
Reg Aff/A&F/Legal/Ext Aff	1,373	135	-	1,507	1,087	29	-	1,117	2,460	164	-	2,624
Risk Management	197	-	-	197	156	-	-	156	353	-	-	353
Total SDG&E	10,971	2,576	593	14,140	8,691	557	128	9,377	19,663	3,133	721	23,517
Corporate Center												
CS - Field & Meter Reading	-	-	-	-	-	-	-	-	-	-	-	-
CS - Information	192	-	-	192	167	-	-	167	359	-	-	359
CS - Office Operations	-	-	-	-	-	-	-	-	-	-	-	-
CS - Technologies, Policies & Solutions	-	-	-	-	-	-	-	-	-	-	-	-
Engineering, Emergency Services & Land	-	0	-	0	-	0	-	0	-	0	-	0
Environmental	-	-	-	-	-	-	-	-	-	-	-	-
Fleet & Facilities	11	37	-	48	10	8	-	18	21	45	-	65
Gas Distribution	-	-	-	-	-	-	-	-	-	-	-	-
Gas Transmission	-	-	-	-	-	-	-	-	-	-	-	-
HR, Disability, Workers Comp & Safety	72	23	-	95	63	5	-	68	135	28	-	163
Information Technology	385	53	-	438	335	12	-	347	720	65	-	785
Real Estate	-	-	176	176	-	-	38	38	-	-	215	215
Reg Aff/A&F/Legal/Ext Aff	81	12	-	92	70	3	-	73	151	14	-	165
Risk Management	-	-	-	-	-	-	-	-	-	-	-	-
Total Corporate Center	741	126	176	1,042	645	27	38	711	1,386	153	215	1,753
Unregulated												
CS - Field & Meter Reading	-	-	-	-	-	-	-	-	-	-	-	-
CS - Information	-	-	-	-	-	-	-	-	-	-	-	-
CS - Office Operations	-	-	-	-	-	-	-	-	-	-	-	-
CS - Technologies, Policies & Solutions	-	-	-	-	-	-	-	-	-	-	-	-
Engineering, Emergency Services & Land	13	4	-	17	11	1	-	12	24	5	-	29
Environmental	0	-	-	0	0	-	-	0	1	-	-	1
Fleet & Facilities	-	-	-	-	-	-	-	-	-	-	-	-
Gas Distribution	-	-	-	-	-	-	-	-	-	-	-	-
Gas Transmission	-	-	-	-	-	-	-	-	-	-	-	-
HR, Disability, Workers Comp & Safety	5	0	-	5	4	0	-	4	9	0	-	9
Information Technology	41	2	-	43	36	0	-	36	77	2	-	79
Real Estate	-	-	-	-	-	-	-	-	-	-	-	-
Reg Aff/A&F/Legal/Ext Aff	9	1	-	10	8	0	-	8	18	1	-	18
Risk Management	-	-	-	-	-	-	-	-	-	-	-	-
Total Unregulated	68	7	-	75	59	2	-	61	128	9	-	136
Total Allocations Out:	11,780	2,709	769	15,258	9,396	586	166	10,148	21,176	3,294	935	25,406
Total SCG Shared Service Forecast	62,509	23,856	16,427	102,792	9,396	586	166	10,148	71,905	24,442	16,593	112,940
Overhead Rates:			NonLabor	NSE								
Bill To Company:	Year	Labor OH %	OH %	OH %								
SDG&E	2016	79.2%	21.6%	21.6%								
Corporate Center/Unregulated	2016	87.2%	21.6%	21.6%								

TABLE MAD-USS-8

SCG Shared Services Summary (Retained and Allocations In)			
Test Year 2016			
(\$2013 Thousands)			
Total Company Summary	(a)	(b)	(c)=(a)+(b)
	Direct Costs	Overheads	Fully Loaded Costs
Retained	87,534	-	87,534
Allocations In			
SDG&E	53,156	21,882	75,038
Overhead Credit Gross	-	(10,148)	(10,148)
Less Payroll Tax + Supp Ldr	-	963	963
Adjusted Overhead Credit	-	(9,185)	(9,185)
Total Net Shared Service O&M	140,690	12,696	153,387
Functional Area Detail			
Retained	Direct Costs	Overheads	Fully Loaded Costs
CS - Field & Meter Reading	2,175	-	2,175
CS - Information	2,854	-	2,854
CS - Office Operations	4,849	-	4,849
CS - Technologies, Policies & Solutions	7,526	-	7,526
Engineering, Emergency Services & Land	17,092	-	17,092
Environmental	3,410	-	3,410
Fleet & Facilities	3,052	-	3,052
Gas Distribution	6,912	-	6,912
Gas Transmission	4,635	-	4,635
HR, Disability, Workers Comp & Safety	1,796	-	1,796
Information Technology	10,354	-	10,354
Real Estate	15,654	-	15,654
Reg Aff/A&F/Legal/Ext Aff	4,830	-	4,830
Risk Management	2,395	-	2,395
Total Retained	87,534	-	87,534
Allocations In	Direct Costs	Overheads	Fully Loaded Costs
From SDG&E			
CS - Information	78	52	131
CS - Operations, Information & Technologies	748	471	1,219
Engineering	79	63	142
Environmental	400	286	686
HR, Disability, Workers Comp & Safety	196	151	346
Information Technology	47,268	17,860	65,128
Real Estate, Land & Facilities	452	151	603
Reg Affairs, Controller, Finance, Legal & Ext Aff	2,662	1,873	4,535
Risk Management	426	322	748
Supply Management & Supplier Diversity	847	652	1,499
Total Allocations In	53,156	21,882	75,038
Shared Service O&M	Direct Costs	Overheads	Fully Loaded Costs
CS - Field & Meter Reading	2,175	-	2,175
CS - Information	2,933	52	2,985
CS - Office Operations	5,598	471	6,069
CS - Technologies, Policies & Solutions	7,526	-	7,526
Engineering, Emergency Services & Land	17,171	63	17,234
Environmental	3,810	286	4,097
Fleet & Facilities	3,052	-	3,052
Gas Distribution	6,912	-	6,912
Gas Transmission	4,635	-	4,635
HR, Disability, Workers Comp & Safety	1,992	151	2,143
Information Technology	57,621	17,860	75,481
Real Estate	16,107	151	16,257
Reg Aff/A&F/Legal/Ext Aff	7,491	1,873	9,365
Risk Management	2,821	322	3,143
Supply Management & Supplier Diversity	847	652	1,499
Total Shared Service O&M	140,690	21,882	162,572
Overhead Credit	-	(9,185)	(9,185)
Total Net Shared Service O&M	140,690	12,696	153,387

TABLE MAD-USS-9

SCG Corporate Reallocation Costs
Test Year 2016
(\$2013 Thousands)

Corporate Reallocation**Costs to Corporate Center**

From SCG
From SDG&E
Total Costs to Corporate Center

Direct Costs	Overheads	Fully Loaded Costs
1,042	711	1,753
11,205	3,660	14,865
12,248	4,370	16,618

Costs Allocated Back to Affiliates

SDG&E
SCG
Unregulated
Total

Direct Costs	Overheads	Fully Loaded Costs
3,846	1,372	5,218
3,736	1,333	5,069
4,666	1,665	6,332
12,248	4,370	16,618

Reallocation Factors From Corporate Center

<u>BillToCo</u>	<u>TY2016</u>
SDG&E	31.40%
SCG	30.50%
Unregulated	38.10%

Note: Difference due to rounding.

2. SDG&E Forecasts

In the following section, Table MAD-USS-10, “SDG&E Shared Services Summary (Direct Costs)” is presented by labor, non-labor and non-standard escalated and shows the details on the following amounts¹¹, prior to overhead loadings:

- a) 100% level forecast by functional area - \$ 139,449;
- b) Allocations-out costs by functional area – \$ 69,506;
- c) Retained costs by functional area - \$ 69,942;
- d) Allocations-in costs by functional area - \$ 14,140; and
- e) Book Expense by functional area - \$ 84,083.

Table MAD-USS-11, “SDG&E Overheads” shows the details on the following amounts, which are after overhead loadings:

- a) Allocations-out to SoCalGas - \$ 75,038;
- b) Allocations-out to Corporate Center - \$ 14,865; and
- c) Allocations-out to Unregulated Affiliates - \$ 6,357.

Table MAD-USS-12, “SDG&E Shared Services Summary (Retained and Allocations In)” shows the details on the following amounts:

- a) Retained costs by functional area - \$ 69,942;
- b) Allocations-in (fully loaded) costs by functional area - \$ 23,517;
- c) Overhead Credit - \$ (25,176); and
- d) Net Shared Services O&M - \$ 68,284.

Finally, Table MAD-USS-13, “SDG&E Corporate Reallocation Costs” shows the details on the following amounts re-allocated from Corporate Center:

- a) SDG&E - \$ 5,218;
- b) SoCalGas - \$ 5,069; and
- c) Unregulated Affiliates - \$ 6,332.

[Remainder of page intentionally left blank]

¹¹ Presented in base year 2013 dollars and in thousands

TABLE MAD-USS-10

SDG&E Shared Services Summary (Direct Costs)
Test Year 2016
(\$2013 Thousands)

Incurred (100% Level Forecast)				
Functional Area	L	NL	NSE	Total
CS - Field	-	-	-	-
CS - Operations, Information & Technologies	704	275	-	979
Electric Generation	729	215	-	944
Engineering	90	2	-	92
Environmental	3,111	1,504	-	4,614
Gas Distribution	-	-	-	-
HR, Disability, Workers Comp & Safety	3,060	2,060	-	5,119
Information Technology	28,969	62,033	-	91,002
Real Estate, Land & Facilities	2,027	3,729	10,523	16,279
Reg Affairs, Controller, Finance, Legal & Ext Aff	10,654	2,929	-	13,583
Risk Management	1,224	1,740	-	2,965
Supply Management & Supplier Diversity	2,909	962	-	3,871
Total	53,478	75,448	10,523	139,449

Allocations Out				
Functional Area	L	NL	NSE	Total
CS - Field	-	-	-	-
CS - Operations, Information & Technologies	533	216	-	749
Electric Generation	61	18	-	78
Engineering	78	2	-	79
Environmental	355	59	-	413
Gas Distribution	-	-	-	-
HR, Disability, Workers Comp & Safety	261	61	-	322
Information Technology	14,872	36,527	-	51,399
Real Estate, Land & Facilities	354	1,216	9,700	11,271
Reg Affairs, Controller, Finance, Legal & Ext Aff	2,501	506	-	3,007
Risk Management	395	31	-	426
Supply Management & Supplier Diversity	986	776	-	1,762
Total	20,394	39,412	9,700	69,506

Retained				
Functional Area	L	NL	NSE	Total
CS - Field	-	-	-	-
CS - Operations, Information & Technologies	171	59	-	230
Electric Generation	669	197	-	866
Engineering	12	0	-	13
Environmental	2,756	1,445	-	4,201
Gas Distribution	-	-	-	-
HR, Disability, Workers Comp & Safety	2,799	1,998	-	4,797
Information Technology	14,097	25,506	-	39,603
Real Estate, Land & Facilities	1,673	2,512	823	5,008
Reg Affairs, Controller, Finance, Legal & Ext Aff	8,154	2,422	-	10,576
Risk Management	830	1,709	-	2,539
Supply Management & Supplier Diversity	1,923	186	-	2,109
Total	33,083	36,036	823	69,942

TABLE MAD-USS-10 Continued

Allocations In				
Functional Area	L	NL	NSE	Total
CS - Field & Meter Reading	220	12	-	231
CS - Information	328	24	-	351
CS - Office Operations	948	234	0	1,183
CS - Technologies, Policies & Solutions	389	228	-	617
Engineering, Emergency Services & Land	1,617	452	-	2,069
Environmental	34	23	-	57
Fleet & Facilities	60	320	-	380
Gas Distribution	546	453	-	998
Gas Transmission	533	124	-	657
HR, Disability, Workers Comp & Safety	142	10	-	151
Information Technology	4,587	562	-	5,149
Real Estate	-	-	592	592
Reg Aff/A&F/Legal/Ext Aff	1,373	135	-	1,507
Risk Management	197	-	-	197
Total	10,971	2,576	593	14,140

Book Expense				
Functional Area	L	NL	NSE	Total
CS - Field	220	12	-	231
CS - Information	328	24	-	351
CS - Operations, Information & Technologies	1,118	294	0	1,413
CS - Technologies, Policies & Solutions	389	228	-	617
Electric Generation	669	197	-	866
Engineering	1,630	452	-	2,082
Environmental	2,790	1,468	-	4,258
Fleet & Facilities	60	320	-	380
Gas Distribution	546	453	-	998
Gas Transmission	533	124	-	657
HR, Disability, Workers Comp & Safety	2,941	2,008	-	4,949
Information Technology	18,684	26,068	-	44,752
Real Estate, Land & Facilities	1,673	2,512	1,415	5,600
Reg Affairs, Controller, Finance, Legal & Ext Aff	9,526	2,557	-	12,083
Risk Management	1,026	1,709	-	2,736
Supply Management & Supplier Diversity	1,923	186	-	2,109
Total	44,055	38,612	1,416	84,083

Note: "Allocations In" section has not been loaded. Loading for these costs will be shown in Table MAD-USS-12 SDG&E Shared Services Summary (Retained and Allocations In).

TABLE MAD-USS-11

SDG&E Overheads												
Test Year 2016												
(\$2013 Thousands)												
	(a)				(b) = (a)*Overhead Rates				(c)=(a)+(b)			
	Direct Costs				Overheads				Fully Loaded Costs			
	L	NL	NSE	Total	L	NL	NSE	Total	L	NL	NSE	Total
Retained	33,083	36,160	823	69,942	-	-	-	-	33,083	36,036	823	69,942
Allocations Out:												
SCG												
CS - Field	-	-	-	-	-	-	-	-	-	-	-	-
CS - Operations, Information & Technologies	532	216	-	748	426	45	-	471	958	261	-	1,219
Electric Generation	61	18	-	78	48	4	-	52	109	22	-	131
Engineering	78	2	-	79	62	0	-	63	140	2	-	142
Environmental	343	57	-	400	274	12	-	286	617	69	-	686
Gas Distribution	-	-	-	-	-	-	-	-	-	-	-	-
HR, Disability, Workers Comp & Safety	186	10	-	196	149	2	-	151	335	12	-	346
Information Technology	13,503	33,764	-	47,268	10,800	7,060	-	17,860	24,303	40,824	-	65,128
Real Estate, Land & Facilities	95	357	-	452	76	75	-	151	172	432	-	603
Reg Affairs, Controller, Finance, Legal & Ext Aff	2,229	432	-	2,662	1,783	90	-	1,873	4,012	523	-	4,535
Risk Management	395	31	-	426	316	6	-	322	710	37	-	748
Supply Management & Supplier Diversity	805	42	-	847	644	9	-	652	1,448	51	-	1,499
Total SCG	18,227	34,929	-	53,156	14,578	7,304	-	21,882	32,805	42,233	-	75,038
Corporate Center												
CS - Field	-	-	-	-	-	-	-	-	-	-	-	-
CS - Operations, Information & Technologies	-	-	-	-	-	-	-	-	-	-	-	-
Electric Generation	-	-	-	-	-	-	-	-	-	-	-	-
Engineering	-	-	-	-	-	-	-	-	-	-	-	-
Environmental	8	1	-	10	7	0	-	8	16	2	-	17
Gas Distribution	-	-	-	-	-	-	-	-	-	-	-	-
HR, Disability, Workers Comp & Safety	49	32	-	81	43	7	-	50	92	38	-	130
Information Technology	1,309	2,361	-	3,670	1,151	494	-	1,645	2,460	2,855	-	5,315
Real Estate, Land & Facilities	171	614	5,433	6,217	150	128	1,136	1,415	321	742	6,569	7,632
Reg Affairs, Controller, Finance, Legal & Ext Aff	255	69	-	324	225	14	-	239	480	84	-	563
Risk Management	-	-	-	-	-	-	-	-	-	-	-	-
Supply Management & Supplier Diversity	172	732	-	904	151	153	-	304	323	885	-	1,208
Total Corporate Center	1,964	3,809	5,433	11,205	1,727	796	1,136	3,660	3,691	4,605	6,569	14,865
Unregulated												
CS - Field	-	-	-	-	-	-	-	-	-	-	-	-
CS - Operations, Information & Technologies	0	-	-	0	0	-	-	0	1	-	-	1
Electric Generation	-	-	-	-	-	-	-	-	-	-	-	-
Engineering	-	-	-	-	-	-	-	-	-	-	-	-
Environmental	3	0	-	4	3	0	-	3	6	0	-	7
Gas Distribution	-	-	-	-	-	-	-	-	-	-	-	-
HR, Disability, Workers Comp & Safety	26	20	-	46	23	4	-	27	49	24	-	73
Information Technology	60	401	-	461	53	84	-	137	113	485	-	598
Real Estate, Land & Facilities	88	246	4,267	4,601	78	51	892	1,021	166	297	5,159	5,622
Reg Affairs, Controller, Finance, Legal & Ext Aff	16	5	-	21	14	1	-	15	30	6	-	36
Risk Management	-	-	-	-	-	-	-	-	-	-	-	-
Supply Management & Supplier Diversity	10	2	-	12	9	0	-	9	19	2	-	21
Total Unregulated	204	674	4,267	5,145	179	141	892	1,213	383	815	5,159	6,357
Total Allocations Out:	20,394	39,412	9,700	69,506	16,484	8,241	2,028	26,754	36,879	47,653	11,728	96,260
Total SDG&E Shared Service Forecast	53,478	75,448	10,523	139,449	16,484	8,241	2,028	26,754	69,962	83,689	12,551	166,202
Overhead Rates:												
Bill To Company:	Year	Labor OH %	NonLabor OH %	NSE OH %								
SCG	2016	80.0%	20.9%	20.9%								
Corporate Center/Unregulated	2016	88.0%	20.9%	20.9%								

TABLE MAD-USS-12

SDG&E Shared Services Summary (Retained and Allocations In)			
Test Year 2016			
(\$2013 Thousands)			
Total Company Summary	(a)	(b)	(c)=(a)+(b)
	Direct Costs	Overheads	Fully Loaded Costs
Retained	69,942	-	69,942
Allocations In			
SCG	14,140	9,377	23,517
Overhead Credit Gross	-	(26,754)	(26,754)
Less Payroll Tax + Supp Ldr	-	1,578	1,578
Adjusted Overhead Credit	-	(25,176)	(25,176)
Total Net Shared Service O&M	84,083	(15,799)	68,284
Functional Area Detail			
Retained			
	Direct Costs	Overheads	Fully Loaded Costs
CS - Field	-	-	-
CS - Operations, Information & Technologies	230	-	230
Electric Generation	866	-	866
Engineering	13	-	13
Environmental	4,201	-	4,201
Gas Distribution	-	-	-
HR, Disability, Workers Comp & Safety	4,797	-	4,797
Information Technology	39,603	-	39,603
Real Estate, Land & Facilities	5,008	-	5,008
Reg Affairs, Controller, Finance, Legal & Ext Aff	10,576	-	10,576
Risk Management	2,539	-	2,539
Supply Management & Supplier Diversity	2,109	-	2,109
Total Retained	69,942	-	69,942
Allocations In			
	Direct Costs	Overheads	Fully Loaded Costs
From SCG			
CS - Field & Meter Reading	231	177	408
CS - Information	351	265	616
CS - Office Operations	1,183	801	1,984
CS - Technologies, Policies & Solutions	617	357	975
Engineering, Emergency Services & Land	2,069	1,379	3,448
Environmental	57	32	89
Fleet & Facilities	380	116	496
Gas Distribution	998	530	1,529
Gas Transmission	657	449	1,106
HR, Disability, Workers Comp & Safety	151	114	266
Information Technology	5,149	3,755	8,904
Real Estate	592	128	720
Reg Aff/A&F/Legal/Ext Aff	1,507	1,117	2,624
Risk Management	197	156	353
Total Allocations In	14,140	9,377	23,517
Shared Service O&M			
	Direct Costs	Overheads	Fully Loaded Costs
CS - Field	231	177	408
CS - Information	351	265	616
CS - Operations, Information & Technologies	1,413	801	2,214
CS - Technologies, Policies & Solutions	617	357	975
Electric Generation	866	-	866
Engineering	2,082	1,379	3,461
Environmental	4,258	32	4,290
Fleet & Facilities	380	116	496
Gas Distribution	998	530	1,529
Gas Transmission	657	449	1,106
HR, Disability, Workers Comp & Safety	4,949	114	5,063
Information Technology	44,752	3,755	48,507
Real Estate, Land & Facilities	5,600	128	5,728
Reg Affairs, Controller, Finance, Legal & Ext Aff	12,083	1,117	13,200
Risk Management	2,736	156	2,891
Supply Management & Supplier Diversity	2,109	-	2,109
Total Shared Service O&M	84,083	9,377	93,459
Overhead Credit	-	(25,176)	(25,176)
Total Net Shared Service O&M	84,083	(15,799)	68,284

1

TABLE MAD-USS-13

SDG&E Corporate Reallocation Costs			
Test Year 2016			
(\$2013 Thousands)			
<u>Corporate Reallocation</u>			
Costs to Corporate Center	Direct Costs	Overheads	Fully Loaded Costs
From SCG	1,042	711	1,753
From SDG&E	11,205	3,660	14,865
Total Costs to Corporate Center	12,248	4,370	16,618
Costs Allocated Back to Affiliates			
	Direct Costs	Overheads	Fully Loaded Costs
SDG&E	3,846	1,372	5,218
SCG	3,736	1,333	5,069
Unregulated	4,666	1,665	6,332
Total	12,248	4,370	16,618
<u>Reallocation Factors From Corporate Center</u>			
<u>BillToCo</u>	<u>TY2016</u>		
SDG&E	31.40%		
SCG	30.50%		
Unregulated	38.10%		
<i>Note: Difference due to rounding.</i>			

2

3 **III. SHARED ASSETS**4 **A. Shared Asset Policy Background**

5 Shared assets are assets that are on the financial records of one utility, but are also used
6 by other Sempra Energy affiliates. For SDG&E, this applies to assets owned and used by
7 SDG&E, which are also used by SoCalGas, Corporate Center and/or other Sempra Energy
8 affiliates. Assets that can be identified, quantified, valued and exclusively used by one entity are
9 not considered a shared asset. Assets that will be used by both utilities, (e.g., software
10 applications) will be considered shared assets. However, items such as a scanner, which will be
11 used exclusively by only one of the utilities will not be considered a shared asset and will be
12 recorded on the financial records for the specific utility.

1 SDG&E and SoCalGas established their Shared Asset Policy in 2002 which dictates how
2 shared assets are reflected in the financial records. Shared assets are recorded on the financial
3 records of the utility (owner) that receives the most service or use from the asset. For example,
4 an asset that is used at a rate of 60% by SoCalGas employees and 40% by SDG&E employees is
5 placed on the financial records of SoCalGas. For situations where utilization between the two
6 utilities is exactly 50%, the established treatment is to place such assets on SoCalGas' records.

7 The utility owning the shared asset bills the other companies using allocation
8 percentages, which are based on factors that reflect the usage level of the asset by the other
9 companies. These utilization factors vary depending upon the asset. For example, a software
10 project for a specific customer process may utilize the number of customers as the measure of
11 utilization, whereas, a software project that is used internally may rely upon a count of the
12 number of employees using the software.

13 These allocation percentages are reviewed annually and are adjusted as needed in
14 accordance with the Shared Asset Policy if there are material changes to the business activities.
15 This review is conducted by the organization responsible for the asset and is coordinated by the
16 ABC organization. If necessary, the allocation percentages change so each utility and affiliate is
17 charged the appropriate level of costs.

18 Once the asset is initially capitalized, it remains on the utility's records even though the
19 utilization factor may change in the future. This practice removes the undue administrative
20 burden and associated costs (such as incremental sales tax) caused by transferring the asset from
21 one utility to the other. Therefore, if an asset is originally placed on SDG&E's records but usage
22 of the asset subsequently declines below 50%, SDG&E nonetheless remains the owner of the
23 asset. Any additions to a shared asset are recorded on the owner's financial records where the
24 original asset is recorded.

25 **B. Shared Asset Billing**

26 SDG&E's shared assets consist primarily of facilities, computer hardware and software,
27 and communications (telecommunication infrastructure). SDG&E charges the Sempra Energy
28 affiliates for the use of these assets by developing a capital revenue requirement. This revenue
29 requirement is retained by SDG&E or billed to other entities according to the particular
30 allocation methodology chosen for each asset to distribute the costs.

1 When developing the revenue requirement, the shared assets are put into asset categories.
2 Assets listed in these categories include those that are currently in service, as well as the
3 forecasted additions as requested in this GRC proceeding through TY 2016. For SDG&E, the
4 shared assets are classified into the following categories:

- 5 • Land;
- 6 • Structures and Improvements;
- 7 • Computer Hardware;
- 8 • Computer Software – 5 year life;
- 9 • Common Communications; and
- 10 • Electric Communications.

11 For each asset category, an annual weighted-average rate base is calculated. A return on
12 rate base, state and federal income taxes, estimated depreciation expense, and property taxes are
13 derived from that information, resulting in a total revenue requirement. The Appendix to this
14 testimony provides further details for the shared asset rate base calculations. The various
15 revenue requirement components are determined and sponsored by other GRC witnesses.¹²

16 Once the billable charges (i.e., revenue requirements) for the asset categories are
17 determined, they are apportioned to the appropriate Sempra Energy affiliates using the allocation
18 percentages. As discussed earlier, the allocation percentages are based on utilization factors
19 developed specifically for each forecasted project by the sponsoring witness. The allocation
20 percentages have been weighted by the net book value or estimated project costs to develop
21 composite allocation percentages for the asset classes in the RO. For example, based on the
22 weighted calculations of the various projects, the structures and improvements category may end
23 up with an allocation of 57.55% retained by SDG&E, 41.18% allocated to SoCalGas, and 1.27%
24 allocated to other Sempra Energy affiliates. These percentages are used to determine the
25 amounts to be charged to the appropriate Sempra Energy affiliates.

26 When utility charges are billed to Corporate Center, the charges are then billed back to

¹² The total company weighted-average rate base is sponsored by SDG&E's Rate Base witness, Jesse Aragon in Ex. SDG&E-27. The calculation of return on rate base percentage is performed in the Results of Operations model and is sponsored by the SDG&E's Summary of Earnings witness, Khai Nguyen in Ex. SDG&E-36. The tax expenses are sponsored by the SDG&E's Taxes witness, Ragan Reeves in Ex. SDG&E-29. Depreciation rates are sponsored by the SDG&E's Depreciation witness, Bob Wiczorek in Ex. SDG&E-28.

1 the utilities and other Sempra Energy affiliates based on a set of allocation percentages
 2 determined by Corporate Center. This process is discussed in the testimony of Corporate Center
 3 witness Peter Wall (Ex. SDG&E-20). However, when developing the revenue requirement, a net
 4 billing process is used for shared asset expense allocations to Corporate Center.¹³ With the net
 5 billing process, the percentage allocation of shared asset charges billed to Corporate Center (that
 6 would then be re-allocated and billed out) is already incorporated within the percentage
 7 allocations to SoCalGas and Sempra Energy affiliates and retained by SDG&E. This eliminates
 8 a second iteration required in developing the revenue requirement. In order to reflect this
 9 activity for the purposes of filing the GRC, the weighted allocation percentages for each Sempra
 10 Energy affiliate are adjusted to reflect the chargeback of shared asset expenses from Corporate
 11 Center.

12 For example, prior to the net billing process, the allocation of structures and
 13 improvements was 4.63% allocated to Corporate Center, 39.51% allocated to SoCalGas, 55.82%
 14 retained by SDG&E, and 0.04% allocated to the Sempra Energy non-regulated affiliates. With
 15 the net billing process, accounting for the results of the Corporate Center charge back process,
 16 the allocations would be adjusted to 0% allocated to Corporate Center, 41.18% allocated to
 17 SoCalGas, 57.55% retained by SDG&E and 1.27% allocated to Sempra Energy non-regulated
 18 affiliates. Refer to Table SDG&E-MAD-1 below.

19 **Table SDG&E-MAD-1**
 20 **Example of Net Billing Process on Allocation Percentages**

	Corporate	SDGE	SCG	Non Reg's	Total
Allocation %	4.63%	55.82%	39.51%	0.04%	100.00%
	-4.63%	1.73%	1.67%	1.23%	0.00%
Net Allocation %	0.00%	57.55%	41.18%	1.27%	100.00%

21 This process effectively leaves a zero allocation of shared asset costs to Corporate Center,
 22 with the Corporate Center allocations spread among SDG&E (retained), SoCalGas, and the
 23 Sempra Energy non-regulated affiliates.
 24

25 [Remainder of page intentionally left blank]

¹³ This net billing process, also called BUCU process, is explained in Section C above.

1 Table SDG&E-MAD-2 reflects the summary of projected revenue requirements from the
 2 RO model related to shared assets by their asset category grouping for TY 2016.

3 **Table SDG&E-MAD-2**
 4 **Summary of Shared Asset Revenue Requirements**

2016	Weighted Average Rate Base	Billable Return	2016 Test Year (In Thousands)		Annual Deprec. Expense	Annual Property Tax	Total Billable Charges	Allocation \$	
			Return Grossed Up for FIT & SIT					SDG&E Retained	Total Billed
Common Land	1,145	89	151		0	17	168	104	64
Common Structures & Improvements	64,987	5,062	8,544		6,536	983	16,062	12,823	3,240
Common Computer Hardware	2,115	165	278		2,101	32	2,411	1,346	1,065
Common Computer Software 5 Year	7,422	578	976		3,031	0	4,007	1,010	2,997
Common Communications	3,021	235	397		982	46	1,425	692	733
Electric Communications	381	30	50		151	6	207	178	29
Total	79,071	6,160	10,395		12,800	1,083	24,279		8,127

5
 6 The total amount billed to the Sempra Energy affiliates as noted above is reflected in the
 7 Miscellaneous Revenues testimony of SDG&E witness Michelle Somerville (Ex. SDG&E-34).

8 **C. Description of Shared Asset Categories**

9 **1. Land**

10 Shared land consists primarily of the property for the Rancho Bernardo Data Center. The
 11 revenue requirement for this asset is allocated based on the amount of data (bandwidth) used by
 12 the various companies. This category represents existing assets and does not include any future
 13 projects. The annual process of reviewing the allocation percentage is performed by the IT
 14 department.

15 **2. Structures and Improvements**

16 Shared structures and improvements consist primarily of “improvements” to the Century
 17 Park Facility and Rancho Bernardo. The allocations for the improvements to the Century Park
 18 Facility are based on space studies developed and performed by the SDG&E Facilities
 19 Management Department. The allocations for the improvements of the Rancho Bernardo Data
 20 Center are based on IT studies for Rancho Bernardo assets. These projects are sponsored by
 21 SDG&E’s Real Estate, Land & Facilities witness, Jim Seifert (see Ex. SDG&E-17). Please refer
 22 to Table SDG&E-MAD-3.

23 **3. Computer Hardware and Software**

24 Shared computer hardware and software consists of mainframe, servers, exchange
 25 (email), and SAP software, among others. Utilization measures for these various assets are

1 tracked, ranging from number of users or customers to the amount of activity used (bandwidth)
2 for each company. The witness sponsoring the IT projects is Stephen Mikovits (see Ex.
3 SDG&E-19-R). Please refer to Table SDG&E-MAD-3.

4 **4. Communications**

5 Shared communication assets include telecommunication infrastructure and network
6 operations equipment. The allocation for these assets is based on the amount of usage by the end
7 users, for example bandwidth. This category represents existing assets and does not include any
8 future projects. The annual process of reviewing the allocation percentage is performed by the
9 IT department.

10 **5. Electric Communications**

11 Shared electric communication assets include telecommunication infrastructure and
12 network operations equipment that were recorded under an electric work order. The shared asset
13 allocations to SoCalGas are primarily the fiber optic communication line between Rancho
14 Bernardo and Monterey Park, whereas the allocations to the affiliate companies are primarily
15 related to the communication equipment at the Headquarters building in San Diego. This
16 category represents existing assets and does not include any future projects.

17 **D. Summary**

18 Table SDG&E-MAD-3 below reflects the forecasted shared asset projects for 2014 –
19 2016 with allocation percentages (prior to the netting of Corporate Center charge-back) and the
20 supporting witness.

21 [Remainder of page intentionally left blank]

Table SDG&E-MAD-3

Forecasted Shared Asset Projects and Allocation Percentages

Project Name	Percentage Allocated To SCG	Percentage Retained By SDGE	Percentage Allocated To Sempra Corp and Affiliates	Witness
Century Park Drought Tolerance Landscaping	3%	96%	1%	Jim Seifert
Century Park PHOTOVOLTAICS Installation	3%	96%	1%	Jim Seifert
CP ADA Access Improvements	3%	96%	1%	Jim Seifert
CP Annex Tenant Improvements	3%	96%	1%	Jim Seifert
CP1 Finish Refresh	3%	96%	1%	Jim Seifert
CP6 Carpet Replacement	3%	96%	1%	Jim Seifert
CP6 Customer Call Ctr Tenant Improvement	3%	96%	1%	Jim Seifert
CP6 Seminar Room AV Upgrade	3%	96%	1%	Jim Seifert
PT14036 SDGE Downtown SCADA	0%	0%	100%	Stephen Mikovits
RBDC Halon System Replacement	36%	61%	3%	Jim Seifert
RBDC Server Rm #2 Expansion, Phase 1	36%	61%	3%	Jim Seifert
RBDC Server Rm #2 Expansion, Phase 2	36%	61%	3%	Jim Seifert
RBDC Server Room #1 CRAC Replacements	36%	61%	3%	Jim Seifert
RBDC UPS Expansion	36%	61%	3%	Jim Seifert
RBDC Warehouse Sprinkler Upgrades	36%	61%	3%	Jim Seifert
SCG My Account Accessibility	100%	0%	0%	Stephen Mikovits

Table SDG&E-MAD-4 below reflects the total miscellaneous revenue (allocated shared asset expenses to the Sempra Energy affiliates) for SDG&E for 2013 Recorded Year and TY 2016.

Table SDG&E-MAD-4

Shared Asset Miscellaneous Revenue (\$000's)		
2013 Recorded	2016 TY	Net Change
9,676	8,127	(1,549)

The decrease from 2013 recorded to TY 2016 is primarily attributable to fewer shared asset additions for the 5-years computer software assets and quicker asset depreciation because of shorter depreciable lives. In total plant additions are increasing but higher accumulated depreciation (due to shorter depreciable lives) is creating a lower weighted average rate base, thus lowering the total billable charges.

As discussed previously, each utility bills the other utility for the allocation of the revenue requirement for each asset category. Table SDG&E-MAD-5 reflects the Shared Asset expense allocation billed to SDG&E from SoCalGas for 2013 Recorded and TY 2016.

1 **Table SDG&E-MAD-5**

Shared Asset Expense Allocation from SCG (\$000's)		
2013 Recorded	2016 TY	Net Change
48,611	46,232	(2,379)

2
3 The main reason for the decrease is due to quicker Shared Asset Depreciation and Asset
4 Retirements and fewer new additions of Shared Assets. The list of projects is identified in my
5 SoCalGas Shared Services and Shared Assets Billings Policy and Processes Testimony (see Ex.
6 SCG-25, Table SCG-MAD-3). The calculation for the shared asset expense can be found in
7 Appendix MAD-A-1 to this testimony.

8 **IV. CONCLUSION**

9 This concludes my revised prepared direct testimony.

1 **V. WITNESS QUALIFICATIONS**

2 My name is Mark A. Diancin. My business address is 555 West Fifth Street, Los
3 Angeles, California 90013. My current position is Project Manager II in the Operations Planning
4 & GRC Data Analysis group for SoCalGas. I was formally the Affiliate Billing and Costing
5 Principal Accountant for SoCalGas.

6 I received a Bachelor of Science from the University of California, Riverside in June
7 1999. I was initially employed by SoCalGas in July 2000 and have held various positions of
8 increasing responsibility in the Accounting and Finance areas of the company, including
9 Financial Planning and Financial Systems. My responsibilities have included participation
10 and/or supervision of SAP CO month-end closing, affiliate billing, overhead rate studies, and
11 SAP/Business Warehouse client support.

APPENDIX - Shared Asset Rate Base Calculations

San Diego Gas and Electric Company Shared Asset Allocation

Allocation Percentages

Billable Costs																	SoCal			Affiliate			Total			
2014	Weighted Average	Annual	Billable	Return Grossed Up	Annual Deprec.	Annual Property Tax	Total Annual Charges	Allocation %				Allocation \$				Segmentation Percentages			Segmentation Amounts			SDGE				
								Retained	Billed	Retained	Billed	Electric	Gas	Electric Distrib	Electric	Gas	Total	Retained	SoCalGas	Other Affil.						
	Rate Base	Return	Return	for FIT & SIT	Expense	Property Tax	Charges	62.04%	37.96%	104	63	74.82%	25.18%	83.52%	40	16	56	62	2	63	Common Land	62.04%	36.97%	0.99%	100.00%	
	Common Structures & Improvements	49,025	7.79%	3,819	6,445	6,148	705	13,298	76.80%	23.20%	10,213	3,065	74.82%	25.18%	83.52%	1,928	777	2,705	2,967	118	3,085	Common Structures & Improvements	76.80%	22.31%	0.89%	100.00%
	Common Computer Hardware	3,805	7.79%	296	500	2,101	55	2,666	57.26%	42.74%	1,521	1,135	74.82%	25.18%	83.52%	709	286	995	1,134	1	1,135	Common Computer Hardware	57.26%	42.71%	0.03%	100.00%
	Common Computer Software 5 Year	14,953	7.79%	1,165	1,966	6,093	0	8,059	34.41%	65.59%	2,773	5,286	74.82%	25.18%	83.52%	3,303	1,331	4,634	5,278	7	5,286	Common Computer Software 5 Year	34.41%	65.50%	0.09%	100.00%
	Common Communications	2,047	7.79%	159	269	1,066	29	1,365	66.60%	33.40%	909	456	74.82%	25.18%	83.52%	285	115	400	392	64	456	Common Communications	66.60%	28.69%	4.71%	100.00%
	Electric Communications	661	7.79%	51	87	135	10	232	85.97%	14.03%	199	32	100.00%	0.00%	83.52%	27	-	27	14	19	32	Electric Communications	85.97%	5.99%	8.04%	100.00%
	Total	71,637	7.79%	5,580	9,418	15,544	815	25,776			10,058				6,292	2,524	8,816	9,847	211	10,058						

2015	Weighted Average	Annual	Return Grossed Up	Annual Deprec.	Annual Property Tax	Total Annual Charges	Allocation %				Allocation \$				Segmentation Percentages			Segmentation Amounts			SDGE					
							Retained	Billed	Retained	Billed	Electric	Gas	Electric Distrib	Electric	Gas	Total	Retained	SoCalGas	Other Affil.							
	Rate Base	Return	for FIT & SIT	Expense	Property Tax	Charges	62.04%	37.96%	104	64	74.82%	25.18%	83.52%	40	16	56	62	2	64	Common Land	62.04%	36.97%	0.99%	100.00%		
	Common Structures & Improvements	54,343	7.79%	4,233	7,144	6,807	801	14,753	78.26%	21.74%	11,546	3,207	74.82%	25.18%	83.52%	2,004	808	2,812	3,083	124	3,207	Common Structures & Improvements	78.26%	20.90%	0.84%	100.00%
	Common Computer Hardware	3,473	7.79%	271	457	2,101	51	2,609	56.58%	43.42%	1,476	1,133	74.82%	25.18%	83.52%	708	285	993	1,132	1	1,133	Common Computer Hardware	56.58%	43.39%	0.03%	100.00%
	Common Computer Software 5 Year	9,970	7.79%	777	1,311	4,466	0	5,777	28.95%	71.05%	1,672	4,104	74.82%	25.18%	83.52%	2,565	1,033	3,598	4,098	7	4,104	Common Computer Software 5 Year	28.95%	70.93%	0.12%	100.00%
	Common Communications	3,807	7.79%	297	501	1,164	56	1,721	56.26%	43.74%	968	753	74.82%	25.18%	83.52%	470	190	660	521	232	753	Common Communications	56.26%	30.28%	13.46%	100.00%
	Electric Communications	524	7.79%	41	69	135	8	212	85.98%	14.02%	182	30	100.00%	0.00%	83.52%	25	-	25	13	17	30	Electric Communications	85.98%	6.00%	8.02%	100.00%
	Total	73,263	7.79%	5,707	9,632	14,674	933	25,239			9,290				5,812	2,332	8,144	8,908	382	9,290						

2016	Weighted Average	Annual	Return Grossed Up	Annual Deprec.	Annual Property Tax	Total Annual Charges	Allocation %				Allocation \$				Segmentation Percentages			Segmentation Amounts			SDGE					
							Retained	Billed	Retained	Billed	Electric	Gas	Electric Distrib	Electric	Gas	Total	Retained	SoCalGas	Other Affil.							
	Rate Base	Return	for FIT & SIT	Expense	Property Tax	Charges	62.04%	37.96%	104	64	74.82%	25.18%	83.52%	40	16	56	62	2	64	Common Land	62.04%	36.98%	0.98%	100.00%		
	Common Structures & Improvements	64,987	7.79%	5,062	8,544	6,536	983	16,062	79.83%	20.17%	12,823	3,240	74.82%	25.18%	83.52%	2,025	816	2,840	3,113	127	3,240	Common Structures & Improvements	79.83%	19.38%	0.79%	100.00%
	Common Computer Hardware	2,115	7.79%	165	278	2,101	32	2,411	55.81%	44.19%	1,346	1,065	74.82%	25.18%	83.52%	666	268	934	1,065	0	1,065	Common Computer Hardware	55.81%	44.18%	0.01%	100.00%
	Common Computer Software 5 Year	7,422	7.79%	578	976	3,031	0	4,007	25.21%	74.79%	1,010	2,997	74.82%	25.18%	83.52%	1,873	755	2,627	2,989	7	2,997	Common Computer Software 5 Year	25.21%	74.61%	0.18%	100.00%
	Common Communications	3,021	7.79%	235	397	982	46	1,425	48.56%	51.44%	692	733	74.82%	25.18%	83.52%	458	185	643	444	289	733	Common Communications	48.56%	31.14%	20.30%	100.00%
	Electric Communications	381	7.79%	30	50	151	6	207	85.98%	14.02%	178	29	100.00%	0.00%	83.52%	24	-	24	12	17	29	Electric Communications	85.98%	6.01%	8.01%	100.00%
	Total	79,071	7.79%	6,160	10,395	12,800	1,083	24,279			8,127				5,085	2,039	7,124	7,686	442	8,127						

MAD-A-1

List of Commonly Used Acronyms

A&G: administrative and general
ABC: Affiliate Billing and Costing
BUCU: Business Unit Charge Ups
CC: Sempra Energy Corporate Center
CPUC: California Public Utilities Commission
FERC: Federal Energy Regulatory Commission
FTEs : full-time employees/equivalents
GRC: general rate case
IT: Information Technology
O&M: operations and maintenance
P&B: Pension and Benefits
PLPD: Public Liability and Property Damage
SAP: Systems Applications and Products
SCG or SoCalGas: Southern California Gas Company
SDG&E: San Diego Gas & Electric Company
Sempra: Sempra Energy
TY: Test year
Variable Pay: also known as incentive compensation plan
Workers' Comp: Workers' Compensation

DEFINITIONS

Shared Services Terms Defined

The following definitions are provided for terms used in this testimony as well as in the testimonies of the Shared Services witnesses for SoCalGas and SDG&E.

100% incurred view: all direct costs prior to any allocations out.

Adjusted-recorded costs: 2013 actual costs, adjusted as needed to reflect an appropriate base level of expenditures for the GRC.

Affiliates: business units within Sempra Energy, including SoCalGas and SDG&E, as well as Corporate Center, and all other non-utility wholly-owned Sempra Energy subsidiaries.

Allocations-in: see “Billed-in” below.

Allocations-out: costs billed from one utility to another or to Corporate Center/Other for Shared Services provided. Shared Services allocations are performed at the cost center level. Individual cost centers have specific, unique allocation methods described in detail within the testimony work papers.

Allocation methods: direct charges or percentage-driven allocations based on Causal/Beneficial drivers or Multi-Factors, which are applied to incurred costs to determine the amount billed from the utility providing a Shared Service to the receiving utility or other Sempra Energy affiliate benefiting from the activity.

Base year expenses: 2013 adjusted-recorded costs.

Billed-in: also referred to as Allocations-in, these are costs received by one utility, due to another utility’s allocations. Billed-in costs become a component of book expense.

Book expense: retained plus billed-in costs. Book expense is the final cost to each utility.

Cost centers: the lowest level organizational unit for which Shared Services costs are tracked and recorded.

Cost Driver: basis for which costs are allocated. Employee headcount is an example of a cost driver.

Direct costs: specific costs, labor and non-labor, for each work activity.

Fully-loaded costs: direct costs plus all applicable indirect charges and overheads. For example, in the process of billing the direct cost of non-union labor to an affiliate for Shared Services performed, overhead costs are added for payroll taxes, workers’ compensation, pension and

benefits, incentive compensation plan, and public liability and property damage insurance, resulting in fully-loaded costs.

Functional areas: organizational groupings within the utilities that provide services of a similar nature. Shared Services functional areas presented in this GRC are listed in subsection B below.

Incurred costs: operating costs incurred by a utility before Shared Services allocations, overhead loading, and escalation.

Non-Shared Services: activities provided by functional areas at one utility which benefit only the utility performing the activity, the costs of which do not need to be allocated and billed out to other entities. Non-Shared Services costs are costs incurred by a utility for its sole benefit, and may include labor costs and non-labor costs. Costs for services provided to the utility by Corporate Center are treated as Non-Shared Services costs by the utility, consistent with how outside vendor costs are treated.

Retained costs: incurred costs remaining at the utility where the costs were incurred, net of allocations.

Shared Services: activities performed by functional areas at one utility for the benefit of (i) the other utility, (ii) Corporate Center, and/or (iii) an unregulated affiliate. A utility providing Shared Services will allocate and bill its costs for providing those services to the entity or entities receiving the service. A utility receiving Shared Services from the other utility will include in its own book expense any costs allocated and billed to for the services received.

TY 2016: the year used in this GRC to establish base rates.

Work group: grouping of one or more cost centers with similar activities within a functional area.

SDG&E 2016 GRC Testimony Revision Log – March 2015

Exhibit	Witness	Page	Line	Revision Detail
SDG&E-25	Mark Diancin	MAD-14	28	Changed from \$53,182 to \$53,156
SDG&E-25	Mark Diancin	MAD-14	29	Changed from \$140,716 to \$140,690
SDG&E-25	Mark Diancin	MAD-15	6	Changed from \$75,069 to \$75,038
SDG&E-25	Mark Diancin	MAD-15	8	Changed from \$153,418 to \$153,387
SDG&E-25	Mark Diancin	MAD-15	11	Changed from \$5,219 to \$5,218
SDG&E-25	Mark Diancin	MAD-17		TABLE MAD-USS-6 updated
SDG&E-25	Mark Diancin	MAD-18		TABLE MAD-USS-7 updated
SDG&E-25	Mark Diancin	MAD-19		TABLE MAD-USS-8 updated
SDG&E-25	Mark Diancin	MAD-20		TABLE MAD-USS-9 updated
SDG&E-25	Mark Diancin	MAD-21	5	Changed from \$139,493 to \$139,449
SDG&E-25	Mark Diancin	MAD-21	6	Changed from \$69,534 to \$69,506
SDG&E-25	Mark Diancin	MAD-21	7	Changed from \$69,959 to \$69,942
SDG&E-25	Mark Diancin	MAD-21	9	Changed from \$84,099 to \$84,083
SDG&E-25	Mark Diancin	MAD-21	12	Changed from \$75,069 to \$75,038
SDG&E-25	Mark Diancin	MAD-21	13	Changed from \$14,867 to \$14,865
SDG&E-25	Mark Diancin	MAD-21	17	Changed from \$69,959 to \$69,942
SDG&E-25	Mark Diancin	MAD-21	19	Changed from \$(25,181) to \$(25,176)
SDG&E-25	Mark Diancin	MAD-21	20	Changed from \$68,295 to \$68,284
SDG&E-25	Mark Diancin	MAD-21	23	Changed from \$5,219 to \$5,218
SDG&E-25	Mark Diancin	MAD-22		TABLE MAD-USS-10 updated
SDG&E-25	Mark Diancin	MAD-23		TABLE MAD-USS-10 Continued updated
SDG&E-25	Mark Diancin	MAD-24		TABLE MAD-USS-11
SDG&E-25	Mark Diancin	MAD-25		TABLE MAD-USS-12
SDG&E-25	Mark Diancin	MAD-26		TABLE MAD-USS-13
SDG&E-25	Mark Diancin	MAD-30	5	Table SDG&E-MAD-2
SDG&E-25	Mark Diancin	MAD-32	8	Table SDG&E-MAD-4

MAD

Exhibit	Witness	Page	Line	Revision Detail
SDG&E-25	Mark Diancin	MAD-32	9-13	<i>Changed from "The decrease from 2013 recorded to TY 2016 is primarily attributable to fewer shared asset additions and quicker asset depreciation for assets with short life-span" to "The decrease from 2013 recorded to TY 2016 is primarily attributable to fewer shared asset additions for the 5-years computer software assets and quicker asset depreciation because of shorter depreciable lives. In total plant additions are increasing but higher accumulated depreciation (due to shorter depreciable lives) is creating a lower weighted average rate base, thus lowering the total billable charges".</i>
SDG&E-25	Mark Diancin	MAD-33	2	<i>Table SDG&E-MAD-5</i>
SDG&E-25	Mark Diancin	MAD-34	3-4	<i>Changed from "the Senior Business Analyst in the Pipeline Safety Enhancement Program" to "Project Manager II in the Operations Planning & GRC Data Analysis"</i>
SDG&E-25	Mark Diancin	MAD-A-1		<i>APPENDIX - Shared Asset Rate Base Calculations updated</i>

MAD