Company:	Southern California Gas Company (U 904 M) / San Diego Gas & Electric Company (U 902 M)
Proceeding:	2019 General Rate Case
Application:	A.17-10-008/A.17-10-007
Exhibit:	SCG-34-R/SDG&E-32-R

REVISED

SOCALGAS / SDG&E DIRECT TESTIMONY OF JAMES VANDERHYE

(SHARED SERVICES & SHARED ASSETS BILLING, SEGMENTATION & CAPITAL REASSIGNMENTS)

DECEMBER, 2017

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

SoCalGas A Sempra Energy utility®

SDGE A Sempra Energy utility®

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SUMMARY

My testimony presents the functional process and methodology of multiple activities covering billed out costs as shared services and shared assets (which also result as billed in costs at the opposite utility), deriving accurate assignment of common activity costs into business segments, the capitalization of clearing accounts and Administrative & General (A&G) accounts, and the identification of costs (and elimination of those costs) for Electric Transmission capital and operations and maintenance (O&M) which are filed for recovery with the Federal Energy Regulatory Commission (FERC).

- Request adoption of costs in Test Year (TY) 2019 Shared Services & Shared Services Overheads resulting in accurate costs billed out:
  - San Diego Gas & Electric (SDG&E) $73,010,000.
  - Southern California Gas Company (SoCalGas) $37,234,000.
- Request adoption of costs in TY 2019 Shared Assets resulting in accurate costs billed out:
  - SDG&E $5,938,000.
  - SoCalGas $56,211,000.
- Request adoption of costs in TY 2019 O&M Reassignment to Capital of:
  - SDG&E
    - $136,836,000 for Electric, excluding Electric Generation.
    - $5,832,000 for Electric Generation.
    - $41,185,000 for Gas.
  - SoCalGas
    - $185,523,000.
- Request adoption of costs in TY 2019 Exclusion for Electric Transmission of:
  - SDG&E
    - $74,320,000 for Electric Transmission O&M.
    - $42,249,000 for Electric Transmission Capital.

SOCALGAS / SDG&E DIRECT TESTIMONY OF JAMES VANDERHYE

(SHARED SERVICES & SHARED ASSETS BILLING, SEGMENTATION & CAPITAL REASSIGNMENTS)

I. INTRODUCTION

A. Summary of Proposals

I sponsor Test Year (TY) 2019 Shared Services Policy and Shared Assets Process, as well as the Segmentation and Reassignment Rates subject area testimony for SDG&E and SoCalGas. Shared services are activities permitted by the Affiliate Transaction Rules Decision (D.) 97-12-088 that are performed by SDG&E and SoCalGas departments that are designated as utility Shared Services departments (i.e., functional area) for the benefit of (i) SDG&E or SoCalGas, (ii) Sempra Energy Corporate Center (Corporate Center), and/or (iii) any Sempra unregulated subsidiaries. Shared Assets are assets that are on the financial records of one utility, but also benefit other Sempra Energy affiliates. Additionally, I sponsor the Segmentation and Capital Reassignment Rates subject area. The testimony describes how SDG&E and SoCalGas proposes the segmentation to business areas and reassignment of certain costs to capital to recognize that those costs are incurred in support of construction efforts. Certain costs that have not been directly assigned to capital or O&M activities are reassigned when costs are incurred in certain FERC Uniform System of Accounts. The range of accounts include Maintenance of Services (account number 892), A&G expenses (account numbers 920-935) and Clearing Accounts (account numbers 163 and 184). Segmentation into business areas occurs at SDG&E and identifies the allocation of common costs into Gas, Electric or Electric Generation, then with Electric into Electric Distribution or Electric Transmission.

B. Organization of Testimony

The first section of this testimony: (1) describes SDG&E's and SoCalGas' policy concerning the recovery of Shared Services costs in this TY 2019 General Rate Case (GRC); (2) explains the Shared Services billing process; and (3) summarizes the Shared Services book expenses for each utility. This testimony serves as a resource to all Shared Services witnesses who are sponsoring Shared Services costs in their testimony. The second section of this testimony presents an overview of the Shared Asset billing process between SDG&E and/or SoCalGas and the other Sempra Energy affiliates. This testimony includes examples of the shared asset process and a list of proposed future shared assets. Later sections of this testimony discuss (1) business segmentation, (2) reassignments to capital for specific accounts, and (3) identification of Electric Transmission allocations, for which SDG&E has eliminated costs from this proceeding.

II. SHARED SERVICE BILLINGS

A. Overview of Shared Services Cost Presentation in This GRC

1. Policy

SDG&E and SoCalGas have the same policy for Shared Services billing. Pursuant to this policy, which complies with D.97-12-088, 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 purpose of the policy is to ensure ratepayers of the utility providing a Shared Service do not to subsidize the costs incurred that support the other utility or any Sempra affiliate.

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,[1] and/or (iii) any unregulated subsidiaries. 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 SDG&E, SoCalGas and to other subsidiaries. For purposes of the GRC, the utility treats costs for services received from Corporate Center as Non-Shared Services costs, consistent with any other outside vendor costs incurred by the utility. This is an important concept to understand when reading the testimonies of all the Shared Services witnesses because only shared services are allocated and billed to those companies receiving support.

B. Shared Services Billing Process

1. Overview

Each Shared Services functional area at SDG&E and SoCalGas is responsible for determining the proper allocation of its Shared Services costs to the appropriate entity or entities receiving the services. The Shared Services billing process ensures: (1) sharing of services is

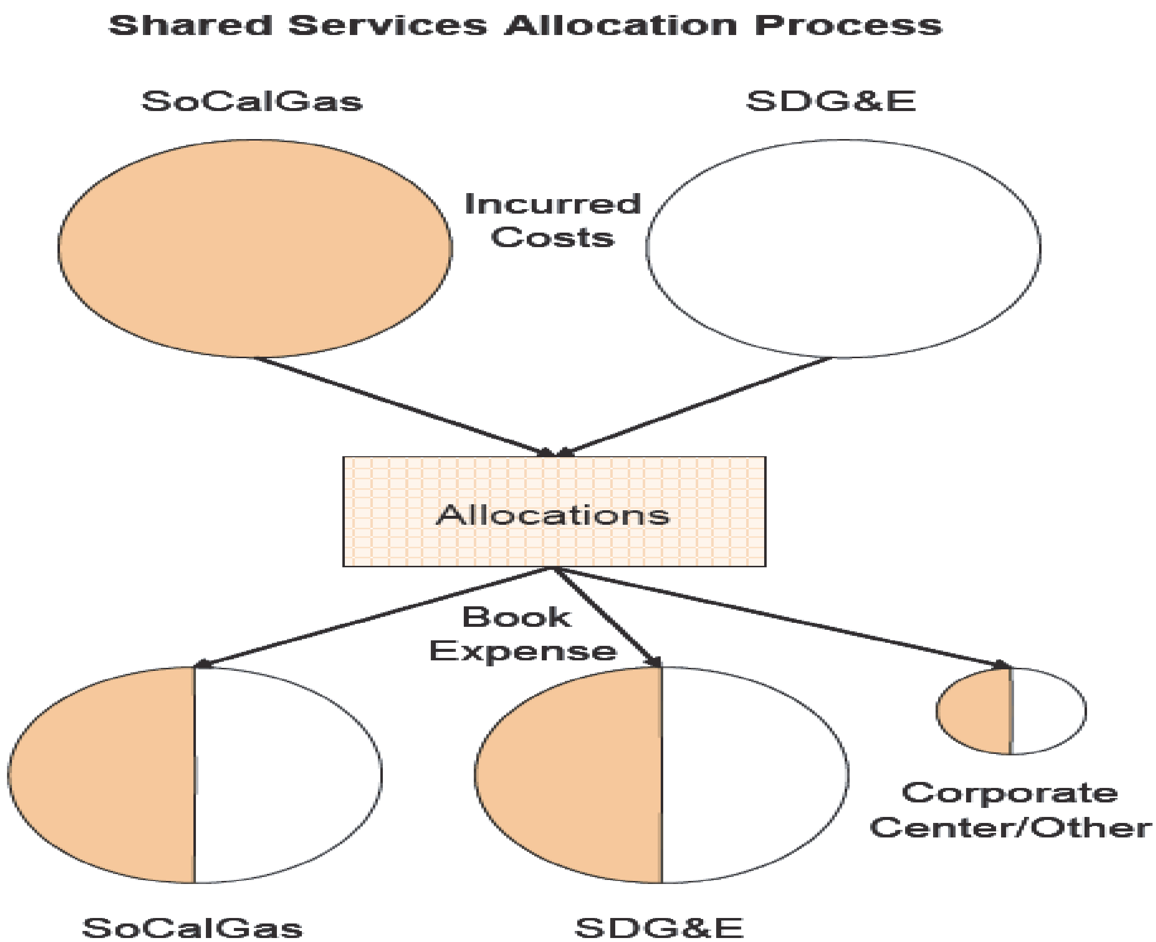
[1] Where Shared Services costs are being shown as allocated out to Corporate Center, those costs will ultimately be allocated to SoCalGas, SDG&E, and the unregulated affiliates, in accordance with the Corporate Center reallocation methodology, which is described in Section II.C.3 of this testimony.

recognized via a formal billing process, (2) services are billed at fully-loaded cost,[2] and (3) supplemental loaders[3] for applicable unregulated entities are applied to the billings. Due to the Shared Services billing process, ratepayers do not subsidize costs that are incurred in support of another entity. However, to provide a complete picture of Shared Services allocations and billing, those costs are presented to demonstrate that SDG&E and SoCalGas are properly excluding those costs from book expense.

2. Allocation of Shared Services Costs

To facilitate proper billing of Shared Services costs to the entity or entities receiving a utility-provided Shared Service, SDG&E and SoCalGas first allocate those costs to the appropriate entity or entities, then bill those costs out to the appropriate entity or entities.

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



[2]"Fully-loaded cost" means the direct cost of goods or services plus all applicable indirect charges and overheads, as directed per D.97-12-088.
[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.

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

3. Direct Allocation

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

i. 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.

ii. Multi-factor

A four-factor analysis is performed for functions that cannot be appropriately defined by a useful 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 and SoCalGas perform 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 costs by cost center as:

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

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

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

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

Step 2. The Directly Retained, Directly Allocated and Amounts Subject to Percent Allocation are added to calculate the cost center's 100% level or Incurred Costs. The Shared

Services cost center forecast is presented in base year 2016 dollars and classified into labor, non-labor and non-standard escalated costs[4] as applicable.

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

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

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

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

(ii) Total Retained amounts for each utility, computed as the Directly Retained amounts plus the remaining dollars retained at the utility once Amounts Subject to Percentage Allocation are allocated out to the other entities. This total can also be derived by taking the 100% level forecast and subtracting the Total Allocated amount, as computed in (i) above.

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

See Illustration example of the Shared Service Billing Process in Appendix C.

2. Loading of Overheads

Consistent with the CPUC's Affiliate Transaction Rules[5] Total Allocated amounts (also referred to as allocations-out costs) for Shared Services include:

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

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[4]Non-standard escalated costs are non-labor O&M expense estimates not subjected to escalation rates and are presented in nominal dollars.
[5]See D.97-12-088 (Affiliate Transaction Rules).

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

3. Corporate Center Reallocation

SDG&E and SoCalGas allocate Shared Services to Corporate Center based on the direct support of the Shared Services organizations to Corporate Center. However, since Corporate Center supports SDG&E, SoCalGas and other unregulated affiliates, these support costs are then reallocated back to those entities. To avoid inefficiencies and circular references associated with affiliates allocating these costs to Corporate Center and then Corporate Center allocating them back to the affiliates, SDG&E and SoCalGas implemented a process to reallocate Corporate Center charges to the receiving affiliate "on behalf" of Corporate Center based on the same allocation percentages that Corporate Center derived for its allocations. The Corporate Reallocation, also known as Business Unit Charge Ups (BUCU), percentages are shown in Table JV-1 and the details can be found in the work papers supporting the testimony of Corporate Center witness Mia DeMontigny (Ex. SDG&E-26/SCG-28).

TABLE JV-1

CORPORATE CENTER BUSINESS UNIT CHARGE UP (BUCU)

Business Unit	2016 BUCU %	2017 BUCU %	2018 BUCU %	2019 BUCU %
SDG&E	31.16%	31.92%	32.35%	32.21%
SoCalGas	33.19%	37.57%	38.30%	38.30%
Unreg Affiliates	35.65%	30.51%	29.35%	29.49%
CorpCtr (Retained)	0.00%	0.00%	0.00%	0.00%

The BUCU allocation is used for both the Corporate Center Shared Service costs reallocation and for the Shared Asset Billing process (described in Section III.B). In the following example, the mathematics are shown in a simplistic fashion to assist in understanding and are not representative of the direct costs, other cost mechanisms deriving total amounts shared and offsets described in detail throughout this testimony.

This process effectively results in zero costs retained by Corporate Center, with any costs incurred during Sharing activities being reallocated back to SDG&E, SoCalGas and the Unregulated Affiliates.

The example below, shown in Table JV-2, uses $1,000, with a shared percentage from SDG&E to Corporate Center of 10%, SoCalGas of 50%, Unregulated Affiliates 5%, with the remaining amount retained. The example BUCU reallocation rate uses SDG&E 40%, SoCalGas 40%, and the Unregulated Affiliates 20%.

TABLE JV-2

EXAMPLE OF CORPORATE CENTER BUCU REALLOCATION

Business Unit	Value	Sharing %	Initial Impact	BUCU Rate	BUCU Impact	Final Result
SDG&E	$1,000	35%	$350	40%	$40	$390
SoCalGas		50%	$500	40%	$40	$540
Unreg Affiliates		5%	$50	20%	$20	$70
CorpCtr (Retained)		10%	$100	(100%)	($100)	$0

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:

<u>**(A)**</u> Standard Labor Overheads include:

- Payroll Tax;
- Variable Pay;[6]
- 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

[6]Variable pay plans are commonly referred to as the Incentive Compensation Plan (ICP).

overhead rates that were applied to the shared service allocations-out costs in this GRC were developed using 2016 recorded data.

i. Payroll Tax Overhead

The Payroll Tax overhead represents the SDG&E and SoCalGas 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 Corporate Center Tax witness Ragan Reeves (Ex. SDG&E-35/SCG-37).

ii. Variable Pay Overhead

The Variable Pay (ICP) overhead represents the variable pay plan costs paid to employees based on Company and individual employee performance as compared to pre-established goals. The ICP overhead rate used in this GRC was applied to the total labor allocated to the affiliates. The ICP rate in this GRC equals to the 2016 pool funding divided by the total 2016 non-union labor. Further details on ICP can be found in the testimony of Corporate Center Compensation & Benefits witness Debbie Robinson (Ex. SDG&E-28/SCG-30).

iii. Workers' Comp Overhead

The Workers' Comp overhead represents the cost of expected payments to employees for work-related injuries, plus the cost of workers' compensation insurance premiums to cover claims over a certain dollar amount. The Workers' Comp overhead rate used in this GRC was applied to the total labor allocated out to the affiliates. The Workers' Comp rate in this GRC equals to the 2016 pool funding divided by the total 2016 labor. Further details on workers' compensation can be found in the testimony of Corporate Center Compensation & Benefits witness Debbie Robinson (Ex. SDG&E-28/SCG-30).

iv. PLPD Overhead

The PLPD overhead represents the cost of expected payments to third parties for liability and property damage claims submitted to SDG&E or SoCalGas, plus the cost of insurance premiums to cover claims over a certain dollar limit. The PLPD overhead rate used in this GRC was applied to the total labor allocated out to the affiliates. The PLPD rate in this GRC equals to the 2016 pool funding divided by the total 2016 labor. Further details on PLPD can be found in the testimony of Corporate Center Insurance witness Neil Cayabyab (Ex. SDG&E-27/SCG-29).

v. P&B Overhead

The P&B overhead represents costs paid by SDG&E or SoCalGas to provide employee benefits, such as health benefit plans, the Company-match portion of contributions to the qualified retirement savings plan 401(k), employee pension contributions and expense, and retiree health benefits. The P&B overhead rate used in this GRC was applied to the total labor allocated out to the affiliates. The P&B rate in this GRC application equals to the 2016 pool funding divided by the total 2016 labor. Further details on P&B can be found in the testimony of Corporate Center Pension & PBOPs witness Debbie Robinson (Ex. SDG&E-29/SCG-31).

vi. Vacation and Sick (V&S)

The V&S overhead represents costs paid by SDG&E or SoCalGas for the employees' non-productive time, such as vacation and sick days, holidays and jury duty. For this GRC filing, V&S was forecasted as a part of total direct labor instead of an indirect overhead loading. Thus, while a V&S overhead rate/factor was developed, it was only provided to the managers to gross up the productive labor. The V&S factor used in this GRC filing was based on the 2016 historical rate.

(B) Non-Labor Overheads include:

The standard non-labor overheads consist solely of the Purchasing overhead. The Purchasing overhead rate loads the costs related to the procurement activity in obtaining goods and services for the organizations. The costs for any procurement activities benefiting the affiliates are billed directly as part of the Shared Service billings. The Purchasing overhead rate used in this GRC was applied to the non-labor charges (which generally represent purchased materials and services). The Purchasing rate in this GRC equals to the 2016 pool funding divided by total 2016 non-labor charges.

(C) Supplemental Labor Loader

In addition to the standard labor loaders, a supplemental labor loader was applied to Shared Services billed to Corporate Center and other unregulated affiliates. The applicable required loader for these billings is 5% of fully-loaded labor. The supplemental labor overhead rate reflects the required loading rate applied to direct labor prior to any other overhead. For this

GRC, inserting the supplemental labor overhead rate in this manner equates to the required loading rate of 5% on fully-loaded labor.

(D) Indirect Support Overhead

The indirect support is represented by the Affiliate Billing A&G overhead. This overhead represents the cost of A&G support provided to all affiliate billings by functional areas, such as Accounting and Human Resources. The Affiliate Billing A&G overhead used in this GRC is applied to the total labor and non-labor allocations-out costs to the affiliates. The Affiliate Billing A&G rate in this GRC equals to the 2016 pool funding divided by total 2016 labor and non-labor costs billed to the affiliates.

2. SDG&E Overheads

Composite overhead loading factors were developed based on 2016 recorded data and used to calculate billed costs for applicable overheads for each affiliate. The 2019 SDG&E loading factors are presented in Table JV-3 below. The use of an overhead rate based on recorded data in this GRC is a reasonable and fair representation of TY 2019 loadings for shared service billings. There is no indication of stranded costs or cross-subsidization at SDG&E and SoCalGas by using an overhead rate based on recorded data. A more detailed discussion is included in my work papers, Exhibits WP-1 through WP-15.

TABLE JV-3

2019 COMPOSITE OVERHEAD LOADING FACTORS FOR SDG&E

	SoCalGas	CORP CTR	UNREGS
LABOR			
Standard Rate	52.51%	52.51%	52.51%
Supplemental Rate	0.00%	7.63%	7.63%
Indirect Support Rate	28.39%	28.39%	28.39%
Sub-total LABOR	**80.90%**	**88.53%**	**88.53%**
NON-LABOR			
Standard Rate	0.45%	0.45%	0.45%
Indirect Support Rate	28.39%	28.39%	28.39%
Sub-total NON-LABOR	**28.84%**	**28.84%**	**28.84%**

3. SoCalGas Overheads

Composite overhead loading factors were developed based on 2016 recorded data and used to calculate billed costs for applicable overheads for each affiliate. The 2019 SoCalGas loading factors are presented in Table JV-4 below. The use of an overhead rate based on recorded data in this GRC is a reasonable and fair representation of TY 2019 loadings for shared service billings. There is no indication of stranded costs or cross-subsidization at SDG&E and SoCalGas by using an overhead rate based on recorded data. A more detailed discussion is included in my work papers, Exhibits WP-16 through WP-30.

TABLE JV-4

2019 COMPOSITE OVERHEAD LOADING FACTORS FOR SoCalGas

	SDG&E	CORP CTR	UNREGS
LABOR			
Standard Rate	62.23%	62.23%	62.23%
Supplemental Rate	0.00%	8.11%	8.11%
Indirect Support Rate	33.40%	33.40%	33.40%
Sub-total LABOR	**95.63%**	**103.74%**	**103.74%**
NON-LABOR			
Standard Rate	0.52%	0.52%	0.52%
Indirect Support Rate	33.40%	33.40%	33.40%
Sub-total NON-LABOR	**33.92%**	**33.92%**	**33.92%**

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 SDG&E's or SoCalGas' 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 to ensure 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 the SDG&E 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 SDG&E and SoCalGas 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 SDG&E or SoCalGas. 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 overhead in the RO model. Therefore, it was also excluded from the overhead credit calculation.

E. Summary of Shared Services Costs

1. SDG&E Forecasts

A summary of TY 2019 SDG&E Shared Service Costs is shown below (in thousands ($000)). A more refined level of detail is included in my work papers, Exhibits WP-31 through WP-34.

<u>100% Level Summary (prior to overhead loadings)</u>

- 100% level forecast - $108,559
- Allocations-out costs - $47,979
- Retained costs - $60,580
- Allocations-in costs - $19,348
- Book Expense - $79,928

<u>Allocations-Out Summary, Fully-Loaded including Overheads</u>

- Allocations-out to SoCalGas - $67,232
- Allocations-out to Corporate Center - $4,882
- Allocations-out to Unregulated Affiliates - $897

<u>Retained Summary, Allocations In (incl. CorpCtr BUCU Reallocation)</u>

- Retained Costs - $60,580
- Allocations-in (fully loaded) costs - $37,773
    - CorpCtr BUCU back to SDG&E, from SDG&E & SoCalGas - $2,002
- Overhead Credit - ($23,490)

<u>Net Shared Services O&M - $74,863</u>

2. SoCalGas Forecasts

A summary of TY 2019 SoCalGas Shared Service Costs is shown below; costs shown in thousands ($000). A more refined level of detail is included in my work papers, Exhibits WP-35 through WP-38.

<u>100% Level Summary (prior to overhead loadings)</u>

- 100% level forecast - $108,040
- Allocations-out costs - $20,231
- Retained costs - $87,809

- Allocations-in costs - $44,251
- Book Expense - $132,060

Allocations-Out Summary, Fully-Loaded including Overheads

- Allocations-out to SDG&E - $35,771
- Allocations-out to Corporate Center - $1,335
- Allocations-out to Unregulated Affiliates - $129

Retained Summary, Allocations In (incl. CorpCtr BUCU Reallocation)

- Retained Costs - $87,809
- Allocations-in (fully loaded) costs - $69,613
  - CorpCtr BUCU back to SoCalGas, from SoCalGas & SDG&E - $2,381
- Overhead Credit - ($15,752)

Net Shared Services O&M - $141,670

III. SHARED ASSETS

A. Shared Asset Policy Background

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

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

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

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

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

B. Shared Asset Billing

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

When developing the revenue requirement, the shared assets are put into asset categories. Assets listed in these categories include those that are currently in service, as well as the forecasted additions as requested in this GRC proceeding through TY 2019.

For SDG&E, the shared assets are classified into the following categories:

- Land;
- Structures and Improvements;

- Computer Hardware;
- Computer Software – 5-year life;
- Common Communications; and
- Electric Communications.

For SoCalGas, the shared assets are classified into the following categories:

- Structures and Improvements;
- Computer Hardware;
- Computer Software;
    - 2-4 year life;
    - 5-8 year life;
    - 9-12 year life;
    - 15-year life;
- Communications; and
- Miscellaneous.

For each asset category, an annual weighted-average rate base is calculated. A return on rate base, state and federal income taxes, estimated depreciation expense, and property taxes are derived from that information, resulting in a total revenue requirement. Table JV-5 (SDG&E) and Table JV-6 (SoCalGas) in this testimony provide summary results for these shared asset rate base calculations by their asset category grouping for TY 2019. The various revenue requirement components are determined and sponsored by other GRC witnesses.[7]

Once the billable charges (i.e., revenue requirements) for the asset categories are determined, they are apportioned to the appropriate Sempra Energy affiliates using the allocation percentages. As discussed earlier, the allocation percentages are based on utilization factors developed specifically for each forecasted project by the sponsoring witness. The allocation percentages have been weighted by the net book value or estimated project costs to develop

[7]The total Company weighted-average rate base is sponsored by SDG&E's Rate Base witness, R. Craig Gentes in Exhibit SDG&E-33 and SoCalGas' Rate Base witness Pat Moersen in Exhibit SCG-35. The calculation of return on rate base percentage is performed in the Results of Operations model and is sponsored by the Summary of Earnings witness Khai Nguyen in Exhibit SDG&E-42/SCG-43. The tax expenses are sponsored by the Corporate Center Tax witness Ragan Reeves in Exhibit SDG&E-35/SCG-37. Depreciation rates are sponsored by the SDG&E's Depreciation witness Matt Vanderbilt in Exhibit SDG&E-34 and SoCalGas' Depreciation witness Flora Ngai in Exhibit SCG-36.

composite allocation percentages for the asset classes in the RO. These percentages are used to determine the amounts to be charged to the appropriate Sempra Energy affiliates.

When utility charges are billed to Corporate Center, the charges are then billed back to SDG&E, SoCalGas and other Sempra Energy affiliates based on a set of allocation percentages determined by Corporate Center. This process is discussed in the testimony of Corporate Center witness Mia DeMontigny (Ex. SDG&E-26/SCG-28). However, when developing the revenue requirement, a net billing process is used for shared asset expense allocations to Corporate Center.[8] With the net billing process, the percentage allocation of shared asset charges billed to Corporate Center (that would then be re-allocated and billed out) is already incorporated within the percentage allocations to SDG&E, SoCalGas and Sempra Energy affiliates and retained by the utility sharing the asset. This eliminates a second iteration required in developing the revenue requirement. In order to reflect this activity for the purposes of filing the GRC, the weighted allocation percentages for each Sempra Energy affiliate are adjusted to reflect the chargeback of shared asset expenses from Corporate Center.

This process effectively leaves a zero allocation of shared asset costs to Corporate Center, with the Corporate Center allocations spread among SDG&E, SoCalGas, and the Sempra Energy unregulated affiliates.

[8] This net billing process, also called BUCU process, is explained in Section II.C.3 above.

TABLE JV-5

2019 SUMMARY OF SHARED ASSET RATE BASE FOR SDG&E

2019	Wtd Avg Rate Base	Billable Return	Return Gross Up FIT & SIT	Annual Depr Expense	Annual Property Tax	Total Billable Charges	Retained	Billed Out
Common Land	1,145	86	146	0	19	164	106	59
Common Structures & Improvements	158,075	11,935	20,142	8,822	2,558	31,522	26,958	4,564
Common Computer Hardware	3,330	251	424	2,660	54	3,138	2,114	1,024
Common Computer Software 5- Yr	66	5	8	164	0	172	118	54
Common Communications	1,275	96	162	190	21	373	234	138
Electric Communications	99	7	13	155	2	170	71	99
Total	163,990	12,381	20,895	11,991	2,653	35,539	29,602	5,938

TABLE JV-6

2019 SUMMARY OF SHARED ASSET RATE BASE FOR SoCalGas

2019	Wtd Avg Rate Base	Billable Return	Return Gross Up FIT & SIT	Annual Depr Expense	Annual Property Tax	Total Billable Charges	Retained	Billed Out
Structures & Improvements	13,487	990	1,671	2,142	177	3,990	3,768	222
Computer Hardware	85,757	6,295	10,623	28,704	1,127	40,455	25,915	14,539
Computer Software:								
2-4 Yrs	(0)	(0)	(0)	0	0	(0)	(0)	(0)
5-8 Yrs	206,480	15,156	25,577	56,161	0	81,739	59,273	22,465
9-12 Yrs	82,128	6,028	10,173	34,429	0	44,603	27,821	16,782
15 Yrs	2,685	197	333	384	0	717	447	270
20 Yrs	0	0	0	0	0	0	0	0
Communications	11,270	827	1,396	5,183	148	6,727	4,800	1,927
Miscellaneous	157	12	19	0	2	21	15	6
Total	401,964	29,504	49,793	127,004	1,455	178,252	122,040	56,211

The total amount "Billed Out" to the Sempra Energy affiliates as noted in Table JV-5 (SDG&E) and Table JV-6 (SoCalGas), above, is reflected in the Miscellaneous Revenues testimony of SDG&E witness Eric Dalton (Ex. SDG&E-40) and SoCalGas witness Annette Steffen (Ex. SCG-41).

C. Description of Shared Asset Categories

1. Land (SDG&E only)

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

2. Structures and Improvements

Shared structures and improvements consist primarily of leasehold improvements to the Century Park Facility and Rancho Bernardo (SDG&E), and Gas Tower and Monterey Park (SoCalGas). This category represents existing assets and does not include any future projects for SoCalGas. The allocations for the improvements are based on space studies developed and performed by the Facilities Management Department. New shared asset projects in service 2017 - 2019 are sponsored by SDG&E's Real Estate, Land & Facilities witness, R. Dale Tattersall (see Ex. SDG&E-22). Please refer to WP-39 (SDG&E).

3. Computer Hardware and Software

Shared computer hardware and software consists of mainframe, servers, exchange (email), and SAP software, among others. Utilization measures for these various assets are tracked, ranging from number of users (employees or customers) to the amount of activity used (bandwidth) for each company. The utilization measures determine the allocation percentages. New shared asset projects in service 2017 – 2019 are sponsored by Information Technology witness, Chris Olmsted (see Ex. SDG&E-24/SCG-26), and by Cybersecurity witness, Gavin Worden (see Ex. SCG-27). Please refer to WP-39 (SDG&E) and WP-40 (SoCalGas).

4. Communications

Shared communication assets include telecommunication infrastructure and network operations equipment. The allocation for these assets is based on the amount of usage by the end users, for example bandwidth. This category represents existing assets and does not include any future projects for SDG&E. New shared asset projects in service 2017 – 2019 are sponsored by Information Technology witness, Chris Olmsted (see Ex. SCG-26), and by Gas Major Projects witness, Michael Bermel (see Ex. SCG-08). Please refer to WP-40 (SoCalGas).

5. Electric Communications (SDG&E only)

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

6. Miscellaneous (SoCalGas only)

This category represents all other items that do not fit in the previous categories. This category represents existing assets and does not include any future projects.

D. Summary

WP-39 (SDG&E) and WP-40 (SoCalGas) provides the forecasted shared asset projects for 2017 – 2019 with allocation percentages (prior to the netting of Corporate Center charge-back) and the representative supporting witness.

Table JV-7 (SDG&E) below reflects the total miscellaneous revenue (billed out shared asset expenses to the Sempra Energy affiliates) for SDG&E for 2016 Recorded Year and TY 2019.

TABLE JV-7

SDG&E SHARED ASSET MISCELLANEOUS REVENUE ($000s)

2016 Recorded	Test Year 2019	Net Change
6,451	5,938	(513)

The decrease from 2016 recorded to TY 2019 is primarily attributable to fewer planned shared asset additions for the computer hardware and no planned 5-year computer software asset classes. In total, additions are increasing but due to significant costs within longer-lived assets, this reduces annual depreciation amounts thus lowering the total billable charges.

Also, the miscellaneous revenue generated from depreciation of Common shared assets billed to affiliates will contain a portion of revenue related to Electric Transmission. For TY 2019 this amounts to a reduction of $781,000 from $5,938,000. The amount for Electric Transmission is removed from this GRC filing. For 2016 Recorded, the Electric Transmission portion amounts to a reduction of $827,000 from $6,451,000. More detailed information is reflected in the Miscellaneous Revenues testimony of SDG&E witness Eric Dalton (Ex. SDG&E-40).

As discussed previously, each utility bills the other utility for the allocation of the revenue requirement for each asset category. Table JV-8 (SDG&E) reflects the Shared Asset expense allocation billed to SDG&E from SoCalGas for 2016 Recorded and TY 2019.

TABLE JV-8

SHARED ASSET EXPENSES FROM SoCalGas ($000s)

2016 Recorded	Test Year 2019	Net Change
52,866	55,249	2,383

The increase for 2016 recorded to TY 2019 is primarily due to a substantial amount of planned shared asset additions for computer software at SoCalGas.

Table JV-9 (SoCalGas) below reflects the total miscellaneous revenue (billed out shared asset expenses to the Sempra Energy affiliates) for SoCalGas for 2016 Recorded Year and TY 2019.

TABLE JV-9

SoCalGas SHARED ASSET MISCELLANEOUS REVENUE ($000s)

2016 Recorded	Test Year 2019	Net Change
54,576	56,211	1,635

The increase from 2016 recorded to TY 2019 is primarily attributable to a higher number of significant planned shared asset additions for computer software.

As discussed previously, each utility bills the other utility for the allocation of the revenue requirement for each asset category. Table JV-10 (SoCalGas) reflects the Shared Asset expense allocation billed to SoCalGas from SDG&E for 2016 Recorded and TY 2019.

TABLE JV-10

SHARED ASSET EXPENSES FROM SDG&E ($000s)

2016 Recorded	Test Year 2019	Net Change
4,351	5,649	1,298

The increase from 2016 recorded to TY 2019 is primarily due to planned SDG&E assets having a higher percentage of shared asset support to SoCalGas and only minimal or no shared asset expense to Corporate Center or the unregulated affiliates.

IV. BUSINESS SEGMENTATION ALLOCATION (SDG&E only)

A. General Discussion

For SDG&E, the FERC account series of Clearing Accounts, Customer Accounts, Customer Service and Information, and A&G Accounts that are specifically related to the Electric Departments or the Gas Department are directly assigned to the appropriate department. The general expenses not directly chargeable to the departments are common costs that must be allocated between the three operating functions for rate setting purposes.

In addition, Gas Department expenses and only the Electric Department expenses attributable to Electric Distribution and Electric Generation are recoverable in customer rates authorized by the CPUC. Therefore, Electric Department costs, excluding Electric Generation, were further allocated to Distribution and Transmission, as discussed in Section VI of my testimony. An example of the segmentation process is shown in Appendix D, The summary of segmentation rates is shown in Appendix E (SDG&E).

B. Allocation to Electric, Electric Generation & Gas Departments

The first step in business segmentation allocations is to separate common expenses between the Electric, Electric Generation, and Gas Departments. The methods used to calculate the allocation percentages are described below.

1. Clearing Accounts

The Electric, Electric Generation and Gas segmentation for Clearing Account costs (FERC account 163 and FERC account 184), were calculated based on the 2016 actual recorded costs and by determining what percentages are booked to Electric, Electric Generation, and Gas accounts. For the derivation of the rates pertaining to these accounts, see Exhibit WP-41.

2. Customer Accounts

Common Customer Accounts costs are booked to FERC accounts 901 - 905. These charges are allocated between Electric and Gas based on the number of customers. The costs in these accounts closely align with activities, such as customer records and billing data. See Exhibit WP-42. To obtain the business segmentation allocation this process first uses the number of average annual Electric customers and Gas customers (Ex. WP-42 at Line 2). The number of total Gas customers is then subtracted from the total Electric customers to determine the number of Electric-only customers (Ex. WP-42 at Line 4). To properly weight the services a customer receives, combined service customers are given a weight of 2 (Ex. WP-42 at Line 7 & 8), and Electric-only customers are given a 1-1/3 weighting, (Ex. WP-42 at Line 9). The allocation of costs to Electric is determined using one combined service customer weighting plus the Electric-only customer service weighting (Ex. WP-42 at Lines 14 & 15). The Gas customers in the allocation are based on the one weighting of combined service customers (Ex. WP-42 at Line 14). The resulting weighted customer counts determine the final allocation percentages (Ex. WP-42 at Line 18).

3. Customer Services & Information

Common Customer Services & Information costs are booked to FERC accounts 907 – 910. Most Customer Services & Information costs are directly charged 100% to Electric or Gas.

Further, more costs have a pre-determined allocation based on a specific underlying percentage to Electric or Gas, depending on the nature of the program/activity these costs support. The remaining common costs are allocated between Electric and Gas based on the level of directly assigned Electric and Gas costs for the entire series of accounts, as reported on SDG&E's 2015 FERC Form 1 and 2. For the derivation of the rates pertaining to these accounts, see Exhibit WP-43.

4. A&G and Common Plant

i. A&G FERC Accounts 920-923, 925 (in part), 926-935 and Common Plant

SDG&E charges common A&G to FERC account numbers 920-923, 925 (in part) and 926-935. SDG&E charges common plant primarily to FERC account numbers 303, 389, 390, 391, 392, 393, 394, 395, 396, 397, and 398. Common A&G and common plant are costs that are shared between SDG&E's Electric and Gas functions. Therefore, SDG&E uses labor ratios to segment these costs between the Electric and Gas functions. Use of the labor ratio to segment common costs was previously accepted by the Commission in the 2012 GRC for SDG&E, and used again without objection in the 2016 GRC for SDG&E.

The labor ratios are prepared based on total SDG&E payroll. Total payroll is retrieved from the SDG&E 2015 FERC Form 1, Distribution of Salaries & Wages, which is provided in Exhibit WP-54-FERC. The amount of A&G labor is then excluded from the Electric, Electric Generation and Gas totals that make up the denominator of the ratio calculation. For the derivation of the rates pertaining to these accounts, see Exhibit WP-44.

Ultimately, the forecasted costs based on the mapping of cost center to FERC for these accounts are multiplied by the labor ratios to determine the amounts included in the Electric, Electric Generation or Gas services tables of the RO Model.

ii. FERC Account 924.0 – Property Insurance

FERC account 924.0 – Property Insurance costs are closely dependent on plant balances since the company is insuring its plant assets. The allocation of property insurance is based on the plant-in-service balances of Electric, Electric Generation and Gas plant, excluding Miscellaneous Intangible plant. Intangible plant assets are excluded because they are non-insurable under property insurance policy. The methodology to derive by plant ratios[9] has been

[9]ER13-941-000, ER13941-001 and ER13-941-002 at 1.3.2.

adopted by the FERC and the CPUC for rate setting purposes in prior GRCs. The continuation of this method by SDG&E ensures consistency between state and federal regulatory jurisdictions for the allocation of common expenses. For the derivation of the rates pertaining to these accounts, see Exhibit WP-52 (Lines 1 – 11).

FERC account 924.1 – Property Insurance, Nuclear assigns 100% of costs to the Electric Department, and only to Electric Distribution. There is no capital reassignment of these costs. This account is described in more detail in testimony by Corporate Center Insurance witness Neil Cayabyab (Ex. SDG&E-27).

iii. FERC Accounts 925 (in part) Injuries & Damages/Account 926 Pension & Benefits

FERC account 925 – Injuries and Damages and FERC account 926 – Pension and Benefits (P&B), are allocated based on labor ratios. The labor ratios are prepared based on total SDG&E payroll. Total payroll is retrieved from the 2015 SDG&E FERC Form 1, Distribution of Salaries & Wages, which is provided in Exhibit WP-54-FERC. The amount of A&G labor is then excluded from the Electric, Electric Generation and Gas totals that make up the denominator of the ratio calculation. For the derivation of the rates pertaining to these accounts, see Exhibit WP-44.

FERC account 925.4 – Injuries & Damages Nuclear assigns no costs for consideration in this GRC proceeding.

iv. FERC Account 925.5 – Wildfire Insurance

Wildfire Insurance is charged 100% to the Electric Department and 0% to the Gas Department because the increase in the insurance premiums have been related to electric lines rather than natural gas facilities. Based on this historical experience, the risk associated with providing natural gas service was not deemed by SDG&E to be a material factor in the Wildfire Insurance cost. Total Wildfire Insurance premiums costs are sponsored by Corporate Center Insurance witness Neil Cayabyab (Ex. SDG&E-27/SCG-29).

Segmentation rates of 94.1% Electric department and 5.9% Electric Generation department can be found with Exhibit WP-50 (Injuries & Damages, Electric Allocation 100% section, right-most columns).

V. REASSIGNMENT TO CAPITAL

A. General Discussion

SDG&E and SoCalGas charge most of their operating costs directly to either capital or O&M. However, some of the A&G expenses, labor overheads (e.g. pension and benefits, injuries and damages), and clearing account costs support construction efforts. After SDG&E has determined the portion of costs associated with Electric, Electric Generation and Gas Services, it begins the capital reassignment process. Since these costs are not charged directly to capital, reassignment to capital rates has been developed based on 2016 base year data. The reassignment follows compliance with the Plant Instructions, Part 101 and Part 201 in the Code of Federal Regulations.[10] These reassigned costs become part of SDG&E's and SoCalGas' rate base.

For TY2019, the SDG&E O&M reassignment for the Electric Department is a credit of approximately $136,836,000, the Electric Generation Department is a credit of approximately $5,832,000, and the Gas Department is a credit of approximately $41,185,000. O&M reassignment of each Business Segment represent the amount of expenses being transferred to construction projects. The SoCalGas O&M reassignment to capital for expenses being transferred to construction projects is approximately $185,523,000. The calculation and derivation of the various reassignment rates for each category are discussed below.

B. Categories / Accounts Subject to Reassignment

The following categories of costs are subject to capitalization via a reassignment A&G, labor overheads or the clearing accounts, shown in Table JV-11 (SDG&E) and Table JV-12 (SoCalGas), and further discussed in detail below:

[10] 18 CFR § 101 and § 201 (Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act).

TABLE JV-11

SDG&E Summary of Reassignments % to Capital

Category	Reassignment %
A&G Costs	6.9%
Labor Overheads	
**Variable Pay	42.4%
**Public Liability & Property Damage	41.1%
**Workers' Compensation	42.2%
**Employee Benefits	42.2%
**Employee Pension & PBOP	38.7%
Warehousing	86.0%
Purchasing	70.2%
Fleet	54.8%
Shops	45.8%
Exempt Material	92.5%
Small Tools	45.9%

TABLE JV-12

SoCalGas Summary of Reassignments % to Capital

Category	Reassignment %
Pipe Fittings	63.3%
A&G Costs	6.2%
Labor Overheads	
**Variable Pay	39.4%
**Public Liability & Property Damage	26.1%
**Workers' Compensation	27.5%
**Employee Benefits	27.5%
**Employee Pension & PBOP	27.9%
Warehousing	96.2%
Purchasing	59.4%
Fleet	18.8%
Shops	14.7%
Exempt Material	91.3%
Small Tools	14.7%

The summary of Capital Reassignment Rates is shown in Appendix E (SDG&E) and Appendix F (SoCalGas).

C. Discussion of Reassignment Percentage Derivation

1. Pipe Fittings (SoCalGas only)

Pipe Fitting costs are initially charged to an O&M account. Pipe fittings are used on capital projects, such as new business and replacement work, and used on maintenance of services and meter set assemblies. They include items such as caps, couplings, ells, nipples, plugs, among others. Pipe Fitting costs are mapped from the cost centers to FERC account 892.4 (see the Summary of Earnings testimony of Khai Nguyen, Ex. SCG-43). The capital reassignment rate of 63.3% was derived by the Gas Distribution organization based on a 4-year average of capital and O&M activities. For the derivation of the rate pertaining to this account, see Exhibit WP-57.

2. A&G Costs

A percentage of A&G direct costs in FERC accounts 920 (in part) – A&G Salaries, and 921 – Office Supplies & Expenses and shared service Sempra affiliate costs in FERC account 923 (in part) – Outside Services Employed are reassigned to construction each year in accordance with the Electric Plant Instructions (Part 101) and Gas Plant Instructions (Part 201) of the Code of Federal Regulations. SDG&E derives the A&G reassignment rate by utilizing the 2016 actual A&G costs assigned to capital. To use this method, the applicable A&G costs are mapped from cost centers to FERC accounts 920, 921, and 923. Utilizing the subset of A&G FERC accounts, the capital reassignment rate of 6.9% (SDG&E) and 6.2% (SoCalGas) was calculated by taking the 2016 actual A&G costs assigned to capital projects and dividing it by 2016 total A&G costs of the same FERC accounts, see Exhibit WP-47 (SDG&E) and WP-58 (SoCalGas).

The use of actual costs reassigned to capital to derive the reassignment rate to capital provides consistency with other Clearing Account categories (i.e., Warehousing, Purchasing, etc.) discussed in my testimony because those categories also use actual costs for the derivation of the reassignment to capital.

3. Labor Overheads

Labor Overheads subject to capitalization are: variable pay costs[11] (FERC account 920.4), public liability and property damage ("PLPD") costs (FERC account 925.0), workers' compensation costs (FERC account 925.1), and pension and benefits (P&B) costs (FERC account 926). These are considered indirect costs related to company labor and accumulated each month in individual Clearing Accounts. These costs are then dispersed through overhead loading rates applied on Company labor.

[11]Variable pay plan costs are commonly referred to as the Incentive Compensation Plan (ICP).

In deriving the percentage of labor overheads that should be reassigned to capital, labor reassignment cost data from 2016 base year final reassignment reports were used. The total labor overhead reassigned to capital is divided by the total overhead charged. This is a proposed change of reporting metric from prior GRC filings. In prior GRC filings, the derived percentage of labor overheads reassigned to capital was based on SDG&E's FERC Form 1, Distribution of Salaries & Wages or SoCalGas' FERC Form 2, Distribution of Salaries & Wages, as a singular rate for all labor overheads. The reason for the proposed change in methodology is primarily due to the exclusion of the variable pay costs to Union employees. Changing the variable pay reassignment rate to match the labor activity makes it accurate; but, now also makes a singular rate for all remaining labor overheads mathematically inconsistent. Therefore, the change to unique reassignment rates for each type of labor overhead results in the most accurate result for each separate labor overhead. Additionally, using the 2016 base year final reassignment reports for labor overheads brings this group into alignment with the Clearing Accounts reassignment rate derivation. For the derivation of the rates pertaining labor overheads, see Exhibit WP-45 (SDG&E) and WP-55 (SoCalGas).

4. Warehousing

Warehousing costs are charged to a Clearing Account that is mapped from the cost center to FERC account 163.1 (see the Summary of Earnings testimony of Khai Nguyen, Ex. SDG&E-42/SCG-43). These costs are allocated as an overhead loading applied on warehouse issuances. The capital reassignment rate of 86.0% (SDG&E) and 96.2% (SoCalGas) was calculated by taking the 2016 actual warehouse overhead charged to capital and dividing it by the 2016 total warehouse overhead charged from the 2016 base year final reassignment report. For the derivation of the rate pertaining to this account, see Exhibit WP-45 (SDG&E) and WP-55 (SoCalGas).

5. Purchasing

Purchasing costs are charged to a Clearing Account that is mapped from the cost center to FERC account 163.2 (see the Summary of Earnings testimony of Khai Nguyen, Ex. SDG&E-42/SCG-43). These costs are allocated as an overhead loading applied on all material and services costs. The capital reassignment rate of 70.2% (SDG&E) and 59.4% (SoCalGas) was calculated by taking the 2016 actual purchasing overhead charged to capital and dividing it by the 2016 total purchasing overhead charged from the 2016 base year final reassignment report.

For the derivation of the rate pertaining to this account, see Exhibit WP-45 (SDG&E) and WP-55 (SoCalGas).

6. Fleet

Fleet costs are charged by specific vehicle class, based on vehicle type, to a Clearing Account that is mapped from the cost center to FERC account 184.2 (see the Summary of Earnings testimony of Khai Nguyen, Ex. SDG&E-42/SCG-43). These costs in the Clearing Account are subsequently assigned to capital and O&M based on an hourly utilization rate recorded against each vehicle in the fleet system. Vehicle utilization is recorded based on hourly usage, up to a 100% assignment of each vehicle. The capital reassignment rate of 54.8% (SDG&E) and 18.8% (SoCalGas) was calculated by taking the 2016 actual fleet utilization assigned to capital and dividing it by 2016 total fleet utilization. For the derivation of the rate pertaining to this account, see WP-46 (SDG&E) and WP-56 (SoCalGas).

7. Shops

Shops costs are charged to a Clearing Account that is mapped from the cost center to FERC account 184.3 (see the Summary of Earnings testimony of Khai Nguyen, Ex. SDG&E-42/SCG-43). These costs are allocated as an overhead loading applied on union labor costs. The capital reassignment rate of 45.8% (SDG&E) and 14.7% (SoCalGas) was calculated by taking the 2016 actual shops overheads charged to capital and dividing it by the 2016 total shops overheads. For the derivation of the rate pertaining to this account, see Exhibit WP-45 (SDG&E) and WP-55 (SoCalGas).

8. Exempt Material

Exempt Material costs are charged to a Clearing Account that is mapped from the cost center to FERC account 184.6 (see the Summary of Earnings testimony of Khai Nguyen, Ex. SDG&E-42/SCG-43). These costs are for bulk type materials, such as nuts and bolts, that are not individually inventoried or managed by the warehouses and are restocked onto service trucks as needed. Exempt Material costs are allocated as an overhead loading applied on warehouse issuances and job direct material. The capital reassignment rate of 92.5% (SDG&E) and 91.3% (SoCalGas) was calculated by taking the 2016 actual exempt material overhead charged to capital and dividing it by the 2016 total exempt material costs. For the derivation of the rate pertaining to this account, see Exhibit WP-45 (SDG&E) and WP-55 (SoCalGas).

9. Small Tools

Small Tools costs are charged to a Clearing Account that is mapped from the cost center to FERC account 184.7 (see the Summary of Earnings testimony of Khai Nguyen, Ex. SDG&E-42/SCG-43). These costs are for purchased tools that do not meet the capitalization rules and are allocated as an overhead loading applied on union labor costs. The capital reassignment rate of 45.9% (SDG&E) and 14.7% (SoCalGas) was calculated by taking the 2016 actual small tools overheads charged to capital and dividing it by the 2016 total small tools overheads. For the derivation of the rate pertaining to this account, see Exhibit WP-45 (SDG&E) and WP-55 (SoCalGas).

VI. ALLOCATION TO ELECTRIC FUNCTIONS (SDG&E ONLY)

A. General Discussion

Electric Transmission costs are under the jurisdiction of the FERC, and thus the costs allocated to Electric Transmission are excluded from this GRC. This section discusses the process used to allocate Electric Transmission costs to be excluded. To allocate Electric Department expenses, excluding Electric Generation, between the Electric Distribution and Electric Transmission functions, SDG&E used an allocation method based on labor charges for all O&M accounts other than Account 924.0 – Property Insurance, and Account 925.5 – Wildfire Insurance. For capital reassignment and Clearing Accounts, SDG&E used 2016 actual data as described below. The summary of segmentation rates is shown in Appendix E (SDG&E).

The labor ratio method has been adopted by FERC and the CPUC for rate setting purposes in prior GRCs. The adoption of this method by SDG&E ensures consistency between state and federal regulatory jurisdictions for the allocation of Electric Transmission expenses separate from Electric Department expenses, excluding Electric Generation.

The SDG&E 2015 SDG&E Annual FERC Form 1, Distribution of Salaries & Wages pages 354-355 (see Exhibit WP-54-FERC) are used for the labor ratio calculations, since this is also filed with the FERC as part of SDG&E's FERC Form 1. The information presented on the Distribution of Salaries & Wages pages is based on detailed analysis of how labor costs were charged to the various functional areas for 2016.

B. Electric Transmission Allocation

Costs that have been allocated to Electric Transmission have been excluded from this GRC. For TY 2019, the total O&M amount that is allocated to Electric Transmission and excluded from this GRC is approximately $74,320,000. For TY 2019, the total capital amount that is allocated to Electric Transmission and excluded from this GRC is approximately $42,249,000. The different categories and processes are described below.

1. Clearing Accounts

Direct Electric capital and O&M costs related to Electric Transmission have been excluded from this GRC. It is also necessary to exclude the proper portion of the costs associated to Electric Transmission from the Clearing Accounts, shown in Table JV-13.

The O&M exclusion rates for the Clearing Accounts have all been calculated by dividing actual Electric Transmission O&M by total Electric O&M, excluding Electric Generation. For the derivation of the rates pertaining to these accounts, see Exhibit WP-48.

TABLE JV-13

Summary of Electric Transmission O&M Allocation Rates

Category	Allocation %
Warehousing	63.1%
Purchasing	20.3%
Fleet	28.3%
Shops	22.0%
Exempt Material	40.0%
Small Tools	22.1%

The capital exclusion rates for the Clearing Accounts, shown in Table JV-14, have all been calculated by dividing actual Electric Transmission capital by total Electric capital, excluding Electric Generation. For the derivation of the rates pertaining to these accounts, see Exhibit WP-49.

TABLE JV-14

Summary of Electric Transmission Capital Allocation Rates

Category	Allocation %
Warehousing	2.6%
Purchasing	54.8%
Fleet	22.5%
Shops	23.4%
Exempt Material	55.9%
Small Tools	23.4%

2. A&G Reassignment to Capital

Once the reassignment of Electric A&G to capital is determined, a portion is allocated to Electric Transmission. The Electric Transmission capital allocation rate is calculated by taking the 2016 actual direct Electric Transmission labor assigned to capital projects and dividing it by 2016 total direct Electric, excluding Electric Generation, labor for capital projects and removal costs. The resulting rate is 28.1%. This rate has been applied to Electric A&G reassigned to capital, FERC accounts matching within the reassignment to capital step(s), Section V of my testimony, with the result being excluded from this GRC. For the derivation of the rate pertaining to these accounts, see Exhibit WP-51.

3. A&G and Common Plant

All Electric A&G accounts, including labor overheads (except for Account 924.0 - Property Insurance, Account 924.1 - Property Insurance, Nuclear, Account 925.5 - Wildfire Insurance and Account 925.9 – Other Injuries & Damages) and Common plant are allocated based on the labor ratio method. The labor ratio is calculated by taking the transmission function direct labor divided by the total direct Electric labor, excluding Electric Generation labor and A&G labor applicable for 2016. The resulting rate of 18.5% is applied to all Electric A&G accounts (except as noted) and Common plant with the result being excluded from this GRC. For the derivation of the rates pertaining to these accounts, see Exhibit WP-50.

4. FERC Account 924.0 – Property Insurance

For Account 924.0 - Property Insurance, the FERC has established a different allocation methodology for setting Electric Transmission customer rates. This methodology is based on the ratio of total Electric Transmission plant to Electric plant, excluding Miscellaneous Intangible plant. Intangible plant assets are excluded because they are non-insurable under property insurance policy. The resulting rate is 44.9%. This rate has been applied to the Electric Account 924.0 expenses with the result being excluded from this GRC. For the derivation of the rate pertaining to this account, see Exhibit WP-52 (Lines 2, 3, 14 – 16).

5. FERC Account 925.5 - Wildfire Insurance

On October 8, 2010, FERC issued an Order[12] in SDG&E's Transmission Owner 3 ("TO3") Cycle 4 proceeding requiring the allocation of Wildfire Insurance costs using labor ratios. As such, in compliance with the FERC Order, the SDG&E wildfire related insurance

[12] San Diego Gas and Electric Company, 133 FERC ¶ 61,016 (2010).

costs allocation factors are based upon the labor ratio method. The labor ratio is calculated by taking the Electric Transmission function O&M direct labor divided by the total direct Electric O&M labor, excluding Electric Generation O&M labor and A&G labor applicable for 2016. The resulting rate of 18.0% with the result being excluded from this GRC.

Further, Wildfire Insurance is associated 100% with fire risk and not with the construction or development of capital projects. Therefore, in accordance with current accounting rules (i.e., Generally Accepted Accounting Principles or GAAP), SDG&E has allocated Wildfire Insurance 100% to O&M expense and 0% to capital.

For the derivation of the rate pertaining to this account, see Exhibit WP-53.

VII. CONCLUSION

The proposals in my testimony accurately reflect the nature of SDG&E's and SoCalGas' business practices. The identification of shared services and shared asset costs shared to the other utility, Corporate Center and the unregulated affiliates ensures the ratepayer is not subsidizing costs when there is no benefit. Additionally, the process, methodology and derivations of the business segmentation rates and reassignment rates ensure costs to support capital activity are properly adjusted from O&M. And, the Electric Transmission allocation rates (which excludes Electric Transmission results) are not recovered in this proceeding.

The process and methodology of segmentation and reassignments of costs between Electric, Electric Generation and Gas Services, the reassignment of costs for A&G, labor overheads and Clearing Accounts, and the division of Electric costs into Electric Distribution and Electric Transmission have been accepted by the Commission and intervenors in past GRCs, as demonstrated by D.16-06-054 (6.12.2 & 7.11.2)[13] and D.13-05-10 (25.1.1).[14] The concept of segmenting and reassigning the common costs is also consistent with the FERC guidelines. SDG&E and SoCalGas believes the methodology used and rates computed continue to be appropriate and reasonable, and therefore should be adopted by the Commission to determine the SDG&E and SoCalGas TY 2019 revenue requirement.

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[13]D.16-06-054 (6.12.2): "ORA's testimony states that it does not oppose SoCalGas' reassignments." D.16-06-054 (7.11.2): "ORA's testimony states that it does not oppose SoCalGas' reassignments."

[14]D.13-05-010 (25.1.1): "None of the other parties take issue with the mapping process, or the segmentation and reassignment rates and processes. We have reviewed the testimony concerning these processes and the rates that SDG&E and SoCalGas used. We adopt as reasonable the mapping processes, the segmentation and reassignment processes, and the segmentation and reassignment rates that SDG&E and SoCalGas use in their GRC applications."

This concludes my prepared direct testimony.

VIII. WITNESS QUALIFICATIONS

My name is James G Vanderhye Jr and I am currently employed by SDG&E as the Affiliate Billing & Costing department supervisor. I am responsible for the oversight of SDG&E's monthly financial close processing, overhead pool management, shared service cost center activities and affiliate bills. My business address is 8330 Century Park Ct., San Diego, CA 92123. I received a Bachelor of Science degree in Finance from San Diego State University. I have been an employee of SDG&E since 1992, holding positions of increasing responsibility within the Controller's Division. As of the date of my errata testimony, I have previously testified before the Commission.

APPENDIX A - List of Commonly Used Acronyms

A&G: Administrative and general

ABC: Affiliate Billing and Costing

BUCU: Business Unit Charge Ups

Corporate Center or CorpCtr: 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

SDG&E: San Diego Gas & Electric Company

Sempra: Sempra Energy

SoCalGas: Southern California Gas Company

TY: Test year

Variable Pay: A.k.a. incentive compensation plan (ICP)

Workers' Comp: Workers' Compensation

APPENDIX B - Shared Services Terms & Definitions

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

<u>100% incurred view</u>: All direct costs prior to any allocations out.

<u>Adjusted-recorded costs</u>: 2016 actual costs, adjusted as needed to reflect an appropriate base level of expenditures for the GRC.

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

<u>Allocations-in</u>: See "Billed-in" below.

<u>Allocations-out</u>: 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.

<u>Allocation methods</u>: 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.

<u>Base-year expenses</u>: 2016 adjusted-recorded costs.

<u>Billed-in</u>: 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.

<u>Book expense</u>: Retained plus billed-in costs. Book expense is the final cost to each utility.

<u>Cost centers</u>: The lowest level organizational unit for which Shared Services costs are tracked and recorded.

<u>Cost Driver</u>: Basis for which costs are allocated. Employee headcount is an example of a cost driver.

<u>Direct costs</u>: Specific costs, labor and non-labor, for each work activity.

<u>Fully-loaded costs</u>: 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 SDG&E and SoCalGas that provide services of a similar nature.

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 2019: 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.

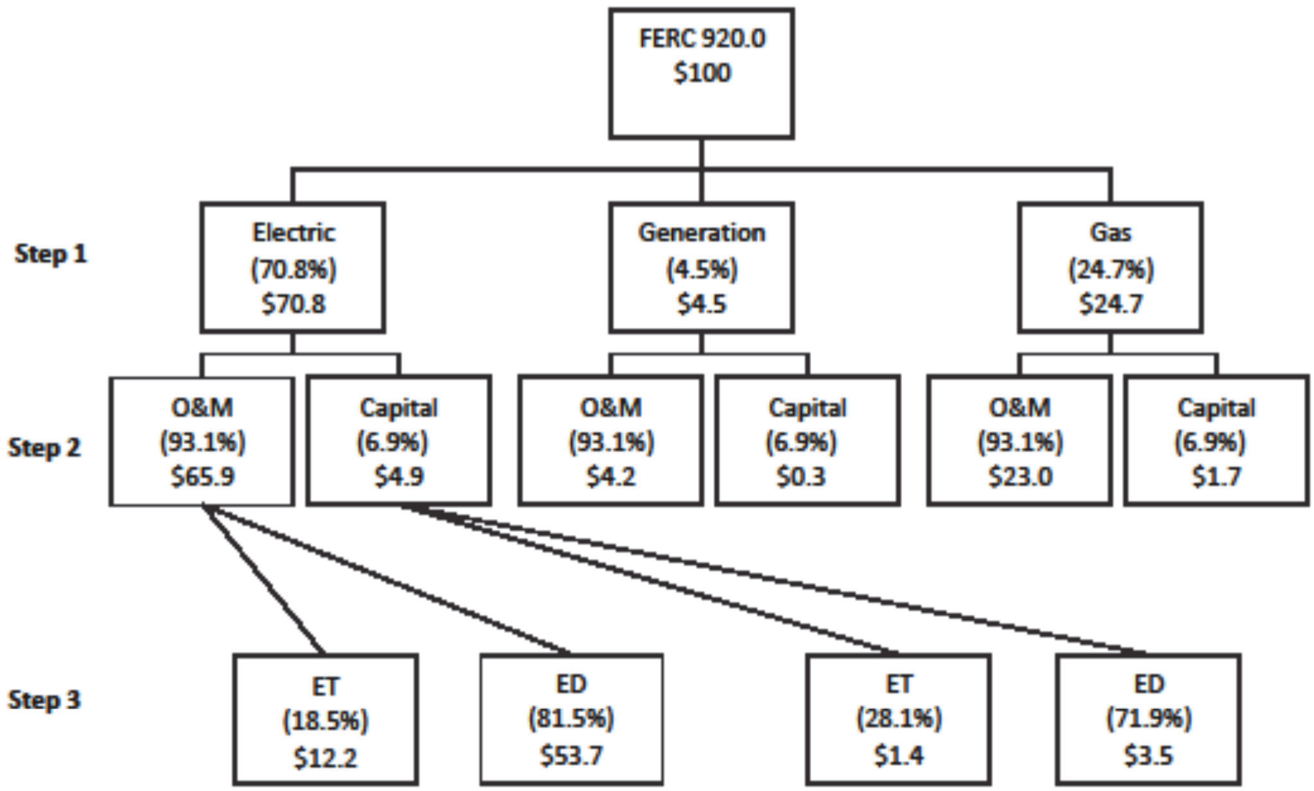
APPENDIX C - Example of Shared Service Billing Process and Cost Distribution

Example of Shared Service Billing Process and Cost Distribution
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.						

APPENDIX D - Example of Segmentation, Reassignment and Elec Trans Carve-Out

SDG&E
2019 General Rate Case
Process for 1/Segmentation, 2/Reassignment, and 3/Electric Transmission Carve Out
For Illustrative Purposes Only
Example of FERC 920



<u>Steps</u>:
1. Segmentation
2. Reassignments (O&M & Capital)
3. Electric Transmission Carve Out (O&M & Capital)

APPENDIX E - Summary of Rates (SDG&E)

SDG&E								
2019 General Rate Case								
Summary of Segmentation, Reassignment & Electric Transmission Carve-Out Rates								
Based on January - December 2016 Data								
			Segmentation			Reassignment	ET Carve-Out	
Line#	**FERC Account**	**Account Description**	**Electric**	**Electric Generation**	**Gas**	**Capital**	**O&M**	**Capital**
1	**Clearing Accounts:**							
2	163.1	Warehousing	89.8%	1.2%	9.0%	86.0%	63.1%	2.6%
3	163.2	Purchasing	74.6%	3.3%	22.1%	70.2%	20.3%	54.8%
4	184.2	Fleet	78.2%	0.2%	21.6%	54.8%	28.3%	22.5%
5	184.3	Shops	74.6%	0.1%	25.3%	45.8%	22.0%	23.4%
6	184.6	Exempt Materials	84.0%	0.7%	15.3%	92.5%	40.0%	55.9%
7	184.7	Small Tools	74.5%	0.1%	25.4%	45.9%	22.1%	23.4%
8	**Customer Accounts & Collections:**							
9	901.0	Supervision	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
10	902.0	MRDG - General Exp	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
11	902.1	MRDG - Training & Other Exp	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
12	902.2	MRDG - Meas Data Ops Exp	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
13	902.5	Meter Reading Exp	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
14	903.0	Customer Records & Collection Exp	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
15	903.1	Customer Records & Collection Exp - Customer Contct	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
16	903.3	Customer Records & Collection Exp - Collections	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
17	903.4	Customer Records & Collection Exp - Pymt Processing	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
18	903.5	Customer Records & Collection Exp - Cust Billing	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
19	903.7	Customer Records & Collection Exp - Postage	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
20	903.8	Customer Records & Collection Exp - Energy Theft	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
21	905.0	Miscellaneous Customer Accounts Expenses	64.9%	0.0%	35.1%	0.0%	0.0%	0.0%
22	**Customer Services & Information:**							
23	907.0	Supervision	87.4%	0.0%	12.6%	0.0%	0.0%	0.0%
24	908.0	Customer Assistance Exp	87.4%	0.0%	12.6%	0.0%	0.0%	0.0%
25	909.0	Informational & Instructional Exp	87.4%	0.0%	12.6%	0.0%	0.0%	0.0%
26	910.0	Misc Customer Svc & Info Exp	87.4%	0.0%	12.6%	0.0%	0.0%	0.0%

SDG&E								
2019 General Rate Case								
Summary of Segmentation, Reassignment & Electric Transmission Carve-Out Rates								
Based on January - December 2016 Data								
				Segmentation		**Reassignment**	**ET Carve-Out**	
Line#	**FERC Account**	**Account Description**	**Electric**	**Electric Generation**	**Gas**	**Capital**	**O&M**	**Capital**
27	**Administrative & General:**							
28	920.0	Admin & General Salaries - Non-Sr. Management	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
29	920.1	Administrative & General - Sr. Management	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
30	920.2	Administrative & General - HR	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
31	920.4	Administrative & General - ICP	70.8%	4.5%	24.7%	42.4%	18.5%	28.1%
32	920.5	Admin & General Salaries - RPA	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
33	921.0	Office Supplies & Exp - Non-Sr. Management	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
34	921.2	Administrative & General - HR	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
35	921.3	Computer End User Support - NonLbr	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
36	921.5	Admin Expenses Transferred - Credit	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
37	923.0	Outside Services Employed - Outside Vendors	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
38	923.1	Outside Services Employed - SECC	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
39	923.2	Outside Services Employed - BUCU's	70.8%	4.5%	24.7%	6.9%	18.5%	28.1%
40	923.3	Outside Services Employed - Shared Assets	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
41	923.4	Outside Services Employed - Deprec/ROR	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
42	924.0	Property Insurance	79.8%	7.9%	12.3%	0.0%	44.9%	0.0%
43	924.1	Property Insurance - Nuclear	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
44	925.0	Injuries & Damages - PLPD Claims	70.8%	4.5%	24.7%	41.1%	18.5%	28.1%
45	925.1	Injuries & Damages - Workers Comp	70.8%	4.5%	24.7%	42.2%	18.5%	28.1%
46	925.2	Safety & Emergency Services & EMF	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
47	925.3	Injuries & Damages - Liability Insurance	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
48	925.4	Injuries & Damages - Nuclear	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
49	925.5	Wildfire Insurance	94.1%	5.9%	0.0%	0.0%	18.0%	0.0%
50	926.0	Employee Pensions & Benefits - Other	70.8%	4.5%	24.7%	42.2%	18.5%	28.1%
51	926.1	Employee Pensions & Benefits - Pension	70.8%	4.5%	24.7%	38.7%	18.5%	28.1%
52	926.2	Employee Pensions & Benefits - PBOPs	70.8%	4.5%	24.7%	38.7%	18.5%	28.1%
53	926.3	Employee Pensions & Benefits - Medical	70.8%	4.5%	24.7%	42.2%	18.5%	28.1%
54	926.4	Employee Pensions & Benefits - Retirement Savings	70.8%	4.5%	24.7%	42.2%	18.5%	28.1%
55	926.5	Employee Pensions & Benefits - Fees, Educ & Transport	70.8%	4.5%	24.7%	42.2%	18.5%	28.1%
56	928.0	Regulatory Commission Exp	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
57	930.1	General Advertising Expenses	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
58	930.2	Miscellaneous General Expenses	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
59	930.3	Miscellaneous General Expenses - OpEx	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
60	931.0	Rents	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
61	931.6	Rents	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
62	935.0	Maintenance of General Plant	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
63	935.1	Maintenance of General Plant	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%
64	935.6	Maintenance of General Plant	70.8%	4.5%	24.7%	0.0%	18.5%	0.0%

APPENDIX F - Summary of Rates (SoCalGas)

SCG			
2019 General Rate Case			
Summary of Reassignment Rates			
Based on January - December 2016 Data			
			Reassignment
Line#	**FERC Account**	**Account Description**	**Capital**
1	**Clearing Accounts:**		
2	163.1	Warehousing	96.2%
3	163.2	Purchasing	59.4%
4	184.2	Fleet	18.8%
5	184.3	Shops	14.7%
6	184.6	Exempt Materials	91.3%
7	184.7	Small Tools	14.7%
8	**Gas Distribution Mainteance:**		
9	892.4	Pipe Fittings	63.3%
10	**Administrative & General:**		
11	920.0	Admin & General Salaries - Non-Sr. Management	6.2%
12	920.1	Administrative & General - Sr. Management	6.2%
13	920.2	Administrative & General - HR	6.2%
14	920.4	Administrative & General - ICP	39.4%
15	920.5	Admin & General Salaries - RPA	6.2%
16	921.0	Office Supplies & Exp - Non-Sr. Management	6.2%
17	921.2	Administrative & General - HR	6.2%
18	921.3	Computer End User Support - NonLbr	6.2%
19	921.5	Admin Expenses Transferred - Credit	6.2%
20	921.6	Admin & General - Facilities	6.2%
21	923.0	Outside Services Employed - Outside Vendors	6.2%
22	923.1	Outside Services Employed - SECC	6.2%
23	923.2	Outside Services Employed - BUCU's	6.2%
24	923.3	Outside Services Employed - Shared Assets	0.0%
25	923.4	Outside Services Employed - Deprec/ROR	0.0%
26	924.0	Property Insurance	0.0%
27	925.0	Injuries & Damages - PLPD Claims	26.1%
28	925.1	Injuries & Damages - Workers Comp	27.5%
29	925.2	Safety & Emergency Services & EMF	0.0%
30	925.3	Injuries & Damages - Liability Insurance	0.0%
31	926.0	Employee Pensions & Benefits - Other	27.5%
32	926.1	Employee Pensions & Benefits - Pension	27.9%
33	926.2	Employee Pensions & Benefits - PBOPs	27.9%
34	926.3	Employee Pensions & Benefits - Medical	27.5%
35	926.4	Employee Pensions & Benefits - Retirement Savings	27.5%
36	926.5	Employee Pensions & Benefits - Fees, Educ & Transport	27.5%
37	928.0	Regulatory Commission Exp	0.0%
38	930.1	General Advertising Expenses	0.0%
39	930.2	Miscellaneous General Expenses	0.0%
40	931.6	Rents	0.0%
41	935.0	Maintenance of General Plant	0.0%
42	935.1	Maintenance of General Plant	0.0%
43	935.6	Maintenance of General Plant	0.0%

SCG/SDGE 2019 GRC Testimony Revision Log – December 2017

Exhibit	Witness	Page	Line	Revision Detail
SCG-34 / SDGE-32	Vanderhye	JV-iv	Throughout	TY 2019 Shared Services & Shared Services Overheads revised from $71,612,000 to $73,010,000 for SDG&E and from $36,414,000 to $37,234,000 for SoCalGas. TY 2019 Shared Assets revised from $5,942,000 to $5,938,000 for SDG&E and from $56,007,000 to $56,211,000 for SoCalGas. TY 2019 O&M Reassignment to Capital revised for SDG&E from $136,806,000 for Electric excluding Electric Generation to $136,836,000, from $5,831,000 for Electric Generation to $5,832,000 and from $41,175,000 for Gas to $41,185,000. TY 2019 O&M Reassignment to Capital revised for SoCalGas from $185,409,000 to $185,523,000. TY 2019 Exclusion for Electric Transmission revised for SDG&E from $74,630,000 for Electric Transmission O&M to $74,320,000 and from $42,241,000 for Electric Transmission Capital to $42,249,000.
SCG-34/SDGE-32	Vanderhye	JV-11	19	Revised numbers in Table JV-3 (2019 Composite Overhead Loading Factors for SDG&E).
SCG-34/SDGE-32	Vanderhye	JV-12	5	Revised numbers in Table JV-4 (2019 Composite Overhead Loading Factors for SoCalGas).
SCG-34/SDGE-32	Vanderhye	JV-13 and JV-14	Beginning at 9	Revised SDG&E's and SoCalGas' TY 2019 forecasts of Shared Services Costs.
SCG-34/SDGE-32	Vanderhye	JV-18	2	Revised numbers in Table JV-5 (2019 Summary of Shared Asset Rate Base for SDG&E).
SCG-34/SDGE-32	Vanderhye	JV-19	1	Revised numbers in Table JV-6 (2019 Summary of Shared Asset Rate Base for SoCalGas).
SCG-34/SDGE-32	Vanderhye	JV-21	9	Revised numbers in Table JV-7 (SDG&E Shared Asset Miscellaneous Revenue ($000s)).
SCG-34/SDGE-32	Vanderhye	JV-21	16	Revised Miscellaenous Revenue reduction number and TY 2019 forecast number.

SCG-34/SDGE-32	Vanderhye	JV-21	24	Revised numbers in Table JV-8 (Shared Asset Expenses from SoCalGas ($000s)).
SCG-34/SDG&E-32	Vanderhye	JV-22	7	Revised numbers in Table JV-9 (SoCalGas Shared Asset Miscellaneous Revenue ($000s)).
SCG-34/SDGE-32	Vanderhye	JV-22	13	Revised numbers in Table JV-10 (Shared Assert Expenses from SDG&E ($000s)).
SCG-34/SDGE-32	Vanderhye	JV-26	12-18	Revised numbers in General Discussion of Reassignment to Capital section.
SCG-34/SDGE-32	Vanderhye	JV-32	1-3	Revised numbers in the introduction to the Electric Transmission Allocation section.
SCG-34 / SDGE-32	Vanderhye	JV-36	8-9	Updated witness qualifications to reflect that since the October 6, 2017 submittal of the original direct testimony, Mr Vanderhye has now testified before the Commission.