

Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2019 General Rate Case
Application: A.17-10-007
Exhibit: SDG&E-36-R

REVISED

SDG&E

DIRECT TESTIMONY OF STEVEN P. DAIS

(WORKING CASH)

DECEMBER 2017

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



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SUMMARY

- Describes the methodology used by San Diego Gas & Electric Company (SDG&E) to prepare its working cash request in compliance with CPUC Standard Practice (SP) U-16.
- Requests adoption of a Test Year (TY) 2019 working cash of \$175 million.

**SDG&E REVISED DIRECT TESTIMONY OF STEVEN P. DAIS
(WORKING CASH)**

I. INTRODUCTION

A. SUMMARY OF REQUEST

I sponsor the Test Year 2019 working cash requirement. My direct testimony describes the methodology used by SDG&E to prepare its working cash request and provides the facts supporting a working cash requirement to compensate investors for providing funds that are committed to the business for paying operating expenses in advance of receiving the offsetting revenues from customers. The net outcome of the timing of these transactions results in SDG&E's average revenue lag being greater than its average expense lag, resulting in a net working cash requirement of \$175 million. As described in further detail below, my showing is mainly based on SDG&E's working cash study and the resulting TY 2019 working cash requirement.

**TABLE SPD-AA
Test Year 2019 Summary of SDG&E Working Cash Requirement
(\$ in millions)**

Operational Cash Requirement	\$97	
Lead-Lag Working Cash Requirement	\$134	
Total Working Cash Requirement		\$231
Working cash provided by non-investors		(\$56)
Net Working Cash Requirement		<u><u>\$175</u></u>

B. Organization of Testimony

In my testimony, I describe the purpose of working cash and the methodology under SP U-16 to determine the working cash allowance. I also provide a narrative and summary reports to describe the steps that SDG&E used to prepare its working cash study. Lastly, I provide detailed descriptions of the key accounts and activities that support SDG&E's TY 2019 request.

II. METHODOLOGY UNDER SP U-16

The following narrative generally describes the steps used to prepare the working cash study that determined SDG&E's TY 2019 request. More details on each account category and

1 specifics relevant to each step in the process are provided later in this testimony, as well as in the
2 accompanying workpapers (Ex. SDG&E-36-WP).

3 Working cash is a component of rate base under SP U-16, and is described as the funding
4 supplied by investors to meet day-to-day utility operational requirements, and to cover the time
5 that expenditures are made for services until the time revenues are collected for those services.
6 When practical, SP U-16 calls for a detailed analysis of working cash referred to as the
7 “weighted average” or “lead-lag days” method.¹ SDG&E employs this method for calculating its
8 working cash allowance. Accordingly, the calculation is comprised of items related to the
9 balance sheet and items related to the income statement as described in SP U-16.

10 **A. Working Cash Requirement for Balancing Sheet Accounts**

11 SDG&E’s requested balance sheet related working cash allowance is based on the sum of
12 the monthly balances from December 2015 through December 2016, less one-half of each
13 December balance, divided by 12 (*i.e.*, a mid-month convention), and then escalated into 2019
14 dollars. This practice of averaging month-end balances for determining the balance sheet-related
15 working cash allowance is outlined in Chapter 3 of CPUC SP U-16.

16 Working cash requirements for balance sheet accounts that require or provide working
17 cash were quantified using 2016 as-recorded account balances and a mid-month convention as
18 described above, to determine weighted-average annual account balances (*see* Tables SDG&E-
19 SPD-5, SDG&E-SPD-6, and SDG&E-SPD-7). These balances were allocated between electric
20 distribution, gas service, and generation based on the allocation percentages described in the
21 Segmentation and Re-Assignment Rates testimony of Jim Vanderhye (Ex. SDG&E-32). The
22 2016 electric distribution, gas service, and generation average balances were then escalated to
23 2019 dollars using the shared services escalation factor index (1.0706), which reflects the
24 weighted-average of labor and non-labor Operations & Maintenance (O&M) indexes, as noted in
25 the escalation testimony of Scott R. Wilder (Ex. SDG&E-39).

¹ See CPUC SP U-16-W, March 2006, Chapter 3, section 1, which compares the detailed method to the simplified method (defined in Chapter 2, section 1). It states: “The detailed basis of determining working cash allowance is normally referred to as the ‘weighted average or lead-lag days’ method. Fundamentally, the same principles apply for the detailed basis as for the simplified basis. That is, first the operational requirement is determined and then amounts of monies available through tax accruals and other funds not supplied by the investor are deducted from the operational requirement.”

B. Working Cash Requirement for Income Statement Accounts

The working cash allowance for income statement items involved performing a lead-lag study. This study quantifies the timing difference between revenue lag and expense lag, using 2016 recorded revenues and expenses:

1. Revenue Lag

Revenue lag is the average number of days for all utility customers between the mid-point of their monthly service and receipt of payment by SDG&E (line 1 of Tables SDG&E-SPD-2, SDG&E-SPD-3, and SDG&E-SPD-4). Because SDG&E customers pay for all categories of service (both electric distribution and gas service) with a single bill, the lead/lag study uses a single value for revenue lag days.

2. Expense Lag

Expense lag is the number of days between the time the utility's expenses are incurred and the time SDG&E pays its suppliers (column A of Table SDG&E-SPD-1). Because SDG&E pays separately for each categories of service, each expense category has its own value for lead/lag days. The expense lag analysis reflects 2016 as-recorded expenses and the associated average expense lag days. To determine the number of expense lag days, SDG&E analyzed 12 months of invoices from calendar year 2016 for account categories that represent the types of expenses forecasted in the GRC (e.g., accounts payable records, O&M expenses, payroll expense, taxes, and benefits, among others). The weighted-average number of expense lag days for each category was derived by the following:

- For the total population of invoices for 2016, determine lag days for each expense category by comparing the service date (either the date service was provided or the midpoint of the service period) to the date cash payment was made;
- For each category, multiplying the lag days by the associated dollar amount for the payment, deriving "dollar-days"; and
- Summing the dollar-days for each payment and dividing that total by the total of the 2016 payment amounts to derive the average expense lag. (Note: the same approach for calculating expense lag was also used for energy commodity purchases, which have no provision for working cash in their specific tariffs).

1 The account category totals were associated with electric distribution, gas service, and
2 generation based on the segmentation factors described in the testimony of Jim Vanderhye (Ex.
3 SDG&E-32).

4 The overall weighted-average number of expense lag days for electric distribution, gas
5 service, and generation for all non-commodity expense categories was calculated, and applied to
6 the total 2016 O&M costs forecasted in the GRC using the following steps:

- 7 • annual 2016 electric distribution, gas service, and generation expenses for
8 each account category were multiplied by total lag days, generating dollar-
9 days (columns c, e, and g in Table SDG&E-SPD-1);
- 10 • dollar-days and total expenses for all account categories except
11 commodities were summed; and
- 12 • total dollar-days were divided by total expenses to determine non-
13 commodity weighted-average lag days (lines 21b, 21d, and 21f of Table
14 SDG&E-SPD-1).

15 To generate dollar-days on non-commodity expenses, I used weighted-average lag days
16 and multiplied them by the sum of the total 2019 O&M costs forecasted in the GRC, forecasted
17 deferred taxes, franchise fees on commodities, pass-through taxes, and refundable program costs
18 (represented as All Other Expenses on line 6 of Tables SDG&E-SPD-2, SDG&E-SPD-3, and
19 SDG&E-SPD-4). For commodity purchases, specific, rather than weighted-average, expense lag
20 days were applied to the forecasted dollars to generate dollar-days.

21 The sum of the Commodity and All Other Expenses dollar-days were divided by total
22 forecasted expenses to determine overall weighted-average expense lag days (line 7 of Tables
23 SDG&E-SPD-2, SDG&E-SPD-3, and SDG&E-SPD-4).

24 In the last step of the lead/lag study, overall weighted-average expense lag days for
25 electric distribution, gas service, and generation were subtracted from revenue lag days to
26 produce net revenue lag days (line 8 of Tables SDG&E-SPD-2, SDG&E-SPD-3, and SDG&E-
27 SPD-4), which is the average number of days between payment of expenses and collection of
28 revenue. This value was then multiplied by total forecasted expenses and divided by 365 days to
29 determine the total working cash requirement associated with revenue and expenses (line 9 of
30 Tables SDG&E-SPD-2, SDG&E-SPD-3, and SDG&E-SPD-4).

C. Derivation of the Total Working Cash Requirement

The final working cash allowance was determined by adding the balance sheet related working cash requirements to the lead/lag related working cash requirements for electric distribution, gas service, and generation (line 9 of Tables SDG&E-SPD-5, SDG&E-SPD-6, and SDG&E-SPD-7).

III. SUMMARY REPORTS

Table SDG&E-SPD-1 summarizes 2016 expense lag days, commodity expenses, non-commodity expenses, and associated dollar-days by account category for electric distribution, gas service, and generation. The overall 2016 weighted-average non-commodity expense lag days are 20.4 days for electric distribution, 23.7 days for gas service, and 17.7 days for generation. These values were developed to apply to 2019 expense forecasts.

Table SDG&E-SPD-1
San Diego Gas & Electric Company
2016 Expense Lag Days Summary - Electric Distribution, Gas Service, and Generation
(\$000)

Line No.	Description	[a]	[b]	[c]	[d]	[e]	[f]	[g]
		Expense Lag Days	Total Company Electric Distribution		Total Company Gas Service		Total Company Generation	
			Expenses	Dollar-Days	Expenses	Dollar-Days	Expenses	Dollar-Days
Commodity Expense:								
1	Purchased Electric Costs	42.08	\$ 1,126,484	\$ 47,398,772	-	-	-	-
2	Purchased Gas Costs	36.87	-	-	\$ 114,482	\$ 4,220,839	-	-
3	Purchased Generation Costs	36.98	-	-	-	-	\$ 154,426	\$ 5,710,181
Non-Commodity Expense:								
4	Payroll Expense	13.02	189,953	2,473,595	81,311	1,058,851	14,814	192,908
5	F.I.C.A. & Medicare Expense	12.38	12,970	160,623	5,552	68,756	1,011	12,526
6	Federal/State Unemployment Insurance	76.05	462	35,103	198	15,026	36	2,738
7	Incentive Compensation Plan	257.50	19,410	4,998,145	8,309	2,139,513	1,514	389,790
8	Employee Benefits	4.50	51,228	230,374	21,929	98,614	3,995	17,966
9	Goods & Services	33.10	373,856	12,374,808	160,033	5,297,178	29,156	965,073
10	Payments by Corporate Center	11.75	100,940	1,186,533	43,209	507,909	7,872	92,534
11	Real Estate Rental	(11.74)	17,436	(204,754)	7,464	(87,647)	1,360	(15,968)
12	Materials Issued from Stores	-	3,316	-	901	-	120	-
13	Property/Ad Valorem/Pass-Through Taxes	86.24	167,002	14,402,270	71,487	6,165,056	13,024	1,123,188
14	Federal Income Taxes--Current	(86.38)	47,662	(4,116,980)	20,402	(1,762,320)	3,717	(321,071)
15	CA Corporate Franchise Taxes	(115.04)	31,339	(3,605,206)	13,415	(1,543,250)	2,444	(281,159)
16	Federal Income Taxes - Deferred	-	(21,677)	-	(13,202)	-	(5,096)	-
17	Depreciation Provision	-	321,511	-	59,728	-	44,489	-
18	Amortization of Insurance Premiums	-	56,026	-	23,983	-	4,369	-
19	EXPENSES EXCLUDING COMMODITY		\$ 1,371,433	\$ 27,934,509	\$ 504,718	\$ 11,957,686	\$ 122,825	\$ 2,178,526
20	TOTAL EXPENSES INCLUDING COMMODITY		\$ 2,497,917	\$ 75,333,282	\$ 619,200	\$ 16,178,525	\$ 277,252	\$ 7,888,707
21	Weighted Average Non-Commodity Expense Lag Days		20.37	[19c/19b]	23.69	[19e/19d]	17.74	[19g/19f]
22	Weighted Average Expense Lag Days (including Commodity)		30.16	[20c/20b]	26.13	[20e/20d]	28.45	[20g/20f]

Note: Values may not add to totals due to rounding.

Tables SDG&E-SPD-2, SDG&E-SPD-3, and SDG&E-SPD-4 summarize the calculations of the 2019 lead/lag working cash requirements of \$92.4 million for electric distribution, \$25.2 million for gas service, and \$16.8 million for generation. As is shown, the calculation is based on 2016 lag days and forecasted 2019 revenues and expenses.

Table SDG&E-SPD-2
San Diego Gas & Electric Company
Lead-Lag Study Summary - Electric Distribution
(\$000)

Line No.	Description	[a] 2016 Expense Lag Days	[b] 2019 Expense Forecast	[c] 2019 Calculated Dollar-Days [a]*[b]
1	Revenue	<u>42.81</u>		
2	Expenses			
3	Commodity Purchases - Electric	42.08	\$ 1,136,809	\$ 47,833,235
4	Commodity Purchases - Core Gas	36.87	-	-
5	Commodity Purchases - Generation Fuel	36.98	-	-
6	All Other Expenses	<u>20.37</u>	<u>1,466,295</u>	<u>29,866,729</u>
7	Total Expenses - a: c/b; b&c: (3+4+5+6)	<u>29.85</u>	<u>\$ 2,603,104</u>	<u>\$ 77,699,964</u>
8	Net Revenue Lag Days [1a-7a] *	<u>12.96</u>		
9	Total Lead-Lag Working Cash Requirement [8a*7b/365]		<u>\$ 92,425</u>	

Note: Values may not add to totals due to rounding.

* Represents 2019 net revenue lag days based on 2019 expense forecasts.

Table SDG&E-SPD-3
San Diego Gas & Electric Company
Lead-Lag Study Summary - Gas Service
(\$000)

Line No.	Description	[a] 2016 Expense Lag Days	[b] 2019 Expense Forecast	[c] 2019 Calculated Dollar-Days [a]*[b]
1	Revenue	<u>42.81</u>		
2	Expenses			
3	Commodity Purchases - Electric	42.08	-	-
4	Commodity Purchases - Core Gas	36.87	161,329	5,948,008
5	Commodity Purchases - Generation Fuel	36.98	-	-
6	All Other Expenses	<u>23.69</u>	<u>430,942</u>	<u>10,209,799</u>
7	Total Expenses - a: c/b; b&c: (3+4+5+6)	<u>27.28</u>	<u>\$ 592,270</u>	<u>\$ 16,157,807</u>
8	Net Revenue Lag Days [1a-7a] *	<u>15.53</u>		
9	Total Lead-Lag Working Cash Requirement [8a*7b/365]		<u>\$ 25,196</u>	

Note: Values may not add to totals due to rounding.

* Represents 2019 net revenue lag days based on 2019 expense forecasts.

Table SDG&E-SPD-4
San Diego Gas & Electric Company
Lead-Lag Study Summary - Generation
(\$000)

Line No.	Description	[a] 2016 Expense Lag Days	[b] 2019 Expense Forecast	[c] 2019 Calculated Dollar-Days [a]*[b]
1	Revenue	<u>42.81</u>		
2	Expenses			
3	Commodity Purchases - Electric	42.08	-	-
4	Commodity Purchases - Core Gas	36.87	-	-
5	Commodity Purchases - Generation Fuel	36.98	111,584	4,126,014
6	All Other Expenses	<u>17.74</u>	<u>218,494</u>	<u>3,875,391</u>
7	Total Expenses - a: c/b; b&c: (3+4+5+6)	<u>24.24</u>	<u>\$ 330,079</u>	<u>\$ 8,001,406</u>
8	Net Revenue Lag Days [1a-7a] *	<u>18.57</u>		
9	Total Lead-Lag Working Cash Requirement [8a*7b/365]		<u>\$ 16,791</u>	

Note: Values may not add to totals due to rounding.

* Represents 2019 net revenue lag days based on 2019 expense forecasts.

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Tables SDG&E-SPD-5, SDG&E-SPD-6, and SDG&E-SPD-7 summarize 2016 and forecasted 2019 balance sheet sources and uses of working cash, and add the lead/lag working cash requirements to derive the total working cash requirements of \$125.1 million for electric distribution, \$30.7 million for gas service, and \$19.3 million for generation.

Table SDG&E-SPD-5
San Diego Gas & Electric Company
Working Cash Summary - Electric Distribution
(\$000)

Line No.	Description	2016 As-Recorded	2019 Requirement
<u>Balance Sheet Account Uses of Working Cash</u>			
1	Cash Balances	\$ 2,762	\$ 2,957
2	Other Receivables	7,335	7,853
3	Prepayments	50,001	53,531
4	Deferred Debits	5,324	5,700
5	Sub-total Balance Sheet Account Uses of Working Cash	65,422	70,041
<u>Balance Sheet Account Sources of Working Cash</u>			
6	Employee Withholdings	(1,017)	(1,089)
7	Current and Accrued Liabilities	(33,911)	(36,305)
8	Sub-total Balance Sheet Account Sources of Working Cash	(34,928)	(37,394)
9	Net Balance Sheet Account Working Cash Requirement [5+8] *	\$ 30,494	\$ 32,647
<u>Lead/Lag Working Capital Requirement **</u>			\$ 92,425
10	Total Working Cash Requirement		\$ 125,072

* Proposed 2019 amount is derived by escalating the 2016 recorded value using the shared service index.

** Proposed 2019 working cash requirement is from the previous table (Table SDG&E-SPD-2).

Note: Values may not add to totals due to rounding.

Table SDG&E-SPD-6
San Diego Gas & Electric Company
Working Cash Summary - Gas Service
(\$000)

Line No.	Description	2016 As-Recorded	2019 Requirement
<u>Balance Sheet Account Uses of Working Cash</u>			
1	Cash Balances	\$ 1,182	\$ 1,265
2	Other Receivables	3,140	3,362
3	Prepayments	13,528	14,483
4	Deferred Debits	<u>2,279</u>	<u>2,440</u>
5	Sub-total Balance Sheet Account Uses of Working Cash	<u>20,129</u>	<u>21,550</u>
<u>Balance Sheet Account Sources of Working Cash</u>			
6	Employee Withholdings	(435)	(466)
7	Current and Accrued Liabilities	<u>(14,516)</u>	<u>(15,541)</u>
8	Sub-total Balance Sheet Account Sources of Working Cash	<u>(14,951)</u>	<u>(16,007)</u>
9	Net Balance Sheet Account Working Cash Requirement [5+8] *	<u><u>\$ 5,178</u></u>	<u><u>\$ 5,543</u></u>
<u>Lead/Lag Working Capital Requirement **</u>			<u>\$ 25,196</u>
10	Total Working Cash Requirement		<u><u>\$ 30,739</u></u>

* Proposed 2019 amount is derived by escalating the 2016 recorded value using the shared service index.

** Proposed 2019 working cash requirement is from the previous table (Table SDG&E-SPD-3).

Note: Values may not add to totals due to rounding.

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Table SDG&E-SPD-7
San Diego Gas & Electric Company
Working Cash Summary - Generation
(\$000)

Line No.	Description	2016 As-Recorded	2019 Requirement
<u>Balance Sheet Account Uses of Working Cash</u>			
1	Cash Balances	\$ 215	\$ 230
2	Other Receivables	572	612
3	Prepayments	3,874	4,147
4	Deferred Debits	415	444
5	Sub-total Balance Sheet Account Uses of Working Cash	5,076	5,433
<u>Balance Sheet Account Sources of Working Cash</u>			
6	Employee Withholdings	(79)	(85)
7	Current and Accrued Liabilities	(2,645)	(2,832)
8	Sub-total Balance Sheet Account Sources of Working Cash	(2,724)	(2,917)
9	Net Balance Sheet Account Working Cash Requirement [5+8] *	\$ 2,352	\$ 2,516
<u>Lead/Lag Working Capital Requirement **</u>			\$ 16,791
10	Total Working Cash Requirement		\$ 19,307

* Proposed 2019 amount is derived by escalating the 2016 recorded value using the shared service index.

** Proposed 2019 working cash requirement is from the previous table (Table SDG&E-SPD-4).

Note: Values may not add to totals due to rounding.

IV. WORKING CASH DETAILS

This section contains further details about each account category used in the development of SDG&E's 2019 GRC working cash request.

A. Balance Sheet Accounts

These categories provide an overview of the main components of each operational cash requirement. For a full list of all the components, please see Schedules P and Schedule P Detail in my workpapers (Ex. SDG&E-36-WP).

1. Operational Cash Requirements

The following accounts are funded with cash supplied by investors, thus establishing the working cash requirement.

a. Cash Balance - The cash balance represents working cash on hand that is required to be available in SDG&E's bank accounts to operate them economically and efficiently. The amounts fluctuate depending upon anticipated cash outlays and inflows. (*See* line 1 of Tables SDG&E-SPD-5, SDG&E-SPD-6, and SDG&E-SPD-7)

b. Other Receivables - This category includes Sundry Billing, Damage Claims Receivables, and Miscellaneous Receivables. (*See* line 2 of Tables SDG&E-SPD-5, SDG&E-SPD-6, and SDG&E-SPD-7)

- SDG&E's Sundry Billings process addresses customer requested construction projects, governmental programs, and marketing services. Receivables for these activities remain on the books until payments are received from third parties. SDG&E does not charge interest on the balances.
- Damage Claims Receivables represent the amount that SDG&E has not collected from outside parties for their damages to utility properties, such as knocking down power poles or damaging gas pipelines.

c. Prepayments - This category includes accounts that SDG&E uses to make prepayments, which do not earn interest on the balances. These accounts include Prepaid General and Fire Insurance Premiums and Miscellaneous Prepayments, such as software support and license fees. (*See* line 3 of Tables SDG&E-SPD-5, SDG&E-SPD-6, and SDG&E-SPD-7)

d. Deferred Debits - This account reflects preliminary survey and investigation costs, which are costs incurred for potential capital projects before they are added to rate base, as

well as other non-current prepaid items. (See line 4 of Tables SDG&E-SPD-5, SDG&E-SPD-6, and SDG&E-SPD-7)

2. Working Capital Not Supplied by Investors

The following accounts represent working cash supplied by sources other than utility investors, thus reducing the total working cash requirement.

a. Employee Withholdings - This category includes the employee paid portion of benefit costs and taxes. (See line 6 of Tables SDG&E-SPD-5, SDG&E-SPD-6, and SDG&E-SPD-7)

b. Current and Accrued Liabilities - These line items include the following items, among others (see line 7 of Tables SDG&E-SPD-5, SDG&E-SPD-6, and SDG&E-SPD-7):

- Workers' compensation reserves represent estimated future costs payable to employees for work-related injuries already incurred. This amount was tax effected at a rate of 40.75% to reflect the fact that the revenues collected are taxed in the year received, and only a portion of this is available as working cash.
- Accrued Vacation was added to be in accordance with the deductions outlined in Chapter 3 of SP U-16.
- Goods Received and Invoices Received Clearing Accounts contain amounts that are payable to suppliers on purchases that will eventually be capitalized and included in rate base. Prior to being capitalized these purchases flow through these accounts and are therefore appropriately reflected within these payables accounts and captured for working cash purposes. This does not include accounts payable for O&M expenses, which are instead included in the lead/lag study.
- CPUC fees are included in workpaper SDGE-36-WP, Schedule P-5.1, and average \$1.1 million.
- Customer Deposits are excluded as a working cash item because the utility pays interest at the Federal Reserve published prime non-financial 3-month commercial paper rate. This treatment is consistent with SP U-16 whereby interest bearing accounts are excluded from working cash. SDG&E is applying the same methodology it has advocated in past GRC's. SP U-16 states under the Customers' Deposits heading that "[o]nly non-interest bearing customer deposits are to be considered" (see Chapter 3, Section 22). Furthermore, the Customer Deposit balance can decrease depending upon the economy and building demand, and these balances do not have the same characteristics as permanent sources of financing.

- Customer Advances for Construction (CAC) are excluded because these amounts are already deducted from rate base; consequently, they are appropriately excluded from working cash since treatment again within working cash would result in a duplicative impact.

B. Income Statement Accounts (Lead/Lag Working Cash Requirements)

1. Revenue Lag (See line 1 of Tables SDG&E-SPD-2, SDG&E-SPD-3, and SDG&E-SPD 4)

The 2016 actual for revenue lag was 42.81 days. Overall, revenue lag increased, primarily due to an increase in collection lag. The collection lag is shown on workpaper SDG&E-36-WP, Schedule C, and uses the “accounts receivable” (A/R) method as outlined in Chapter 3 of SP U-16. The table below illustrates how total revenue lag days were derived:

Table SDG&E-SPD-AB – Total Revenue Lag

Meter Reading Lag	15.21 days
Billing Lag	2.19 days
Collection Lag	24.55 days
Bank Lag	<u>0.86 days</u>
Total Revenue Lag	42.81 days

a. Collection lag days are based upon an analysis of A/R balances and revenues for 2016. Annual revenues divided by the adjusted average monthly accounts receivable balance results in the average number of accounts receivable turnovers per year. Revenue collection lag is equal to 365 days divided by the average number of accounts receivable turnovers per year.

b. Meter reading lag reflects the lag from the date the meter is read until the time the bill is prepared and mailed to the customer. SDG&E performed a detailed query of all meter reads in 2016, which resulted in 15.21 lag days.

c. Billing lag is calculated from the midpoint of each month’s consumption to when the meter is read. This study assumes that service is rendered evenly before and after the meter is read, which results in an average lag of 2.19 days.

d. Bank lag reflects the amount of days from the bank inflow until those funds become available, which results in 0.86 lag days.

2. 2016 Expense Lag Categories

a. Purchased Commodities, Electric Generation - The ratemaking mechanisms associated with these costs presume collection of revenues as supply is consumed and payment of expenses when supply is delivered. Therefore, this line item is necessary to recover a working cash allowance for the net revenue lag associated with commodity purchases. See line 1 of Table SDG&E-SPD-1 for summarized information, or see my workpaper (Ex. SDG&E-36-WP), Schedule D-1, for more detail. Components include:

- Electric Purchases (Non-California Independent System Operator [Non-CAISO]): 45.7 days and reflect electric purchases outside of CAISO.
- Electric Purchases (CAISO): 22.5 days based on the CAISO calendar. These are payments for purchases of electricity from CAISO. The days were calculated by subtracting the payment due date minus the service period midpoint. The average days were then calculated for all the service period days. Please see my workpaper (Ex. SDG&E-36-WP), Schedule D, for more detail.
- Option Premiums: (147.2) days. Options are used to hedge gas procurement costs as a risk mitigation measure. Option premiums are paid up front and are either exercised or expire unused. This number is negative because the option payments are made when the options are purchased and the option service period typically extends over several months.

b. Purchased Commodities, Core Gas - As with purchased electric costs, the ratemaking mechanisms associated with these costs presume collection of revenues as supply is consumed and payment of expenses when supply is delivered. Therefore, this line item is necessary to recover a working cash allowance related to the net revenue lag associated with commodity purchases. The 2016 purchased gas costs were derived by summing the payments made each month. Lag days reflect the weighted-average of all core gas commodity payments. Each category has the total invoice amounts and its corresponding dollar weighted days. These dollar-days were calculated by multiplying the invoice amount by the number of lag days. The total dollar-days for all the categories were divided by the total invoice amounts to come up with the number of lag days for this category. See line 2 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule D-2, for more detail.

- As proposed by TURN and agreed to by SDG&E in its 2016 GRC, SDG&E will unbundle the commodity-related working cash from distribution to sales for rate recovery purposes.²

c. Purchased Commodities, Generation Fuel - As with purchased electric and gas costs, the ratemaking mechanisms associated with these costs presume collection of revenues as supply is consumed and payment of expenses when supply is delivered. Therefore, this line item is necessary to recover a working cash allowance related to the net revenue lag associated with commodity purchases. The 2016 purchased generation costs were derived by summing the payments made each month. Lag days reflect the weighted-average of all core gas commodity payments. Each category has the total invoice amounts and its corresponding dollar weighted days. These dollar-days were calculated by multiplying the invoice amount by the number of lag days. The total dollar-days for all the categories were divided by the total invoice amounts to come up with the number of lag days for this category. See line 3 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule D-3, for more detail.

d. Payroll Expense - This category includes O&M and the O&M portion of clearing and refundable labor costs as detailed in the first three lines of Schedule E, and further described below. Payroll expenses are incurred every other Friday and withholding taxes are paid the day before payday to the outsourcing company that makes all tax payments on behalf of SDG&E; therefore, the resulting net lag is 13.0 lag days. See line 4 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule E, for more detail.

e. Federal Insurance Contributions Act Tax (FICA) - As with the tax portion of payroll expenses above, FICA (which includes Old-Age, Survivor's, and Disability Insurance ["OASDI"] and Medicare) expenses are paid the day before payday to SDG&E's payroll outsourcing company. See line 5 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule F, for more detail.

f. Federal Unemployment Tax Act (FUTA) and State Unemployment Insurance (SUI) - These costs are paid electronically to SDG&E's payroll outsourcing company one month after each quarter end. This study reflects both FUTA and SUI, net of capital. See line 6 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule F, for more detail.

² A.14-11-004, Ex. 229/Foster at 16.

1 **g. Variable Pay / Incentive Compensation Plan (ICP)** - This compensation is
2 earned and reflected as an expense in the preceding year (2016), but paid out in 2017. See line 7
3 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule G, for more detail.

4 **h. Employee Benefits** – See line 8 of Table SDG&E-SPD-1 or my workpaper (Ex.
5 SDG&E-36-WP), Schedule H, for more detail.

6 **i. Goods and Services** -The Goods and Services expense amount includes other
7 expenses that have not been identified separately on the lead/lag study. See line 9 of Table
8 SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule I, for more detail.

9 **j. Payments by Corporate Center** - SDG&E pays for its share of expenses
10 incurred by Corporate Center on behalf of the utility. The lead/lag days from corresponding
11 expense categories in this lead/lag study are applied to Corporate Center payments to calculate
12 overall lag days. See line 10 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP),
13 Schedule J, for more detail.

14 **k. Real Estate Lease Payments** - Real Estate Leases are typically paid in advance
15 and include such leases as office space, easements, and communication sites. Most of the 2016
16 lease payment dollars were paid monthly. The overall expense lag is negative because payments
17 are made prior to the midpoint of the occupancy period. See line 11 of Table SDG&E-SPD-1 or
18 my workpaper (Ex. SDG&E-36-WP), Schedule K, for more detail.

19 **l. Materials Issued from Stores** - This category includes materials issued for
20 O&M. See line 12 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule
21 L, for more detail.

22 **m. Property/Ad Valorem/Pass-through Taxes** - Most of these payments are made
23 electronically. This category includes property/ad valorem taxes, franchise fees, and pass-
24 through taxes collected on behalf of government agencies.

- 25 • Although pass-through taxes do not flow through the income statement,
26 they are a source of working cash and are appropriately included in the
27 lead/lag study. The taxes are collected from ratepayers, and payments are
28 made later to taxing authorities.

29 See line 13 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule
30 Ma and Mb, for more detail.

31 **n. Federal Income Taxes, Current** - Tax expense lags are based on statutory due
32 dates: April 15 of each year for the first quarter, June 15 for the second quarter, September 15 for

1 the third quarter, and December 15 for the fourth quarter. The tax lag days of each payment are
2 calculated between the midpoint of the year and the wire payment date. *See* line 14 of Table
3 SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule N-1, for more detail.

4 **o. California Corporate Franchise Taxes, Current** - Tax expense lags are based
5 on statutory due dates of April 15, June 15, and December 15. The method of calculating the lag
6 days is the same. California Franchise Taxes also include tax refunds of \$9.4 million from
7 previous periods with negative lag days of 622. These were funds that were held by the state
8 instead of SDG&E and therefore result in negative lag days. *See* line 15 of Table SDG&E-SPD-
9 1 or my workpaper (Ex. SDG&E-36-WP), Schedule N-2, for more detail.

10 **p. Federal/State Income Taxes, Deferred** - This amount reflects the change of
11 deferred federal and state taxes in 2016. Accumulated deferred income taxes (ADIT) are
12 deducted from rate base as cost-free funds available for investment. However, the financial
13 recording of deferred income taxes does not produce cost-free capital and the funds do not
14 become available until customers pay their bills. Therefore, the recorded amount of ADIT
15 overstates the actual amount of cost-free funds that are available. The inclusion of deferred
16 income taxes at zero lag days in the overall expense lag weighted-average corrects this condition,
17 in the same manner as depreciation, described below. *See* line 16 of Table SDG&E-SPD-1 or
18 my workpaper (Ex. SDG&E-36-WP), Schedule O-1, for more detail.

19 **q. Depreciation** - When properties are built, the cash cycle begins with cash outlays
20 by investors and ends with cash recovery by investors through depreciation expense. In the
21 interim, such funding is part of SDG&E's rate base. Depreciation expense reduces rate base, but
22 SDG&E's recovery is delayed for the duration of the billing or revenue lag. Weighting these
23 dollars at zero expense lag recognizes that the investor funding has occurred, but it has not been
24 recovered and, consistent with SP U-16, depreciation expense is given 0 lag days.³ *See* line 17 of
25 Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule O-2, for more detail.

26 **r. Amortization of Insurance Premiums** - SDG&E's insurance premiums are paid
27 in advance and therefore result in a working cash need. Weighting these dollars at zero expense

³ Expense lag for capital purchases is credited to customers through current and accrued liabilities in the balance sheet section of the working cash study. "Since book depreciation expense is occurring uniformly day by day and accumulated depreciation is deducted from the rate base, the practice is to include depreciation provisions at zero lag days." (SP U-16, Chapter 3, p. 1-15.)

lag recognizes that the investor funding has occurred, but the funds have not been recovered. Amortization is weighted at zero expense lag for the same reason as previously described under depreciation. See line 18 of Table SDG&E-SPD-1 or my workpaper (Ex. SDG&E-36-WP), Schedule O-3, for more detail.

3. TY 2019 Expense Components

Forecasted expenditures for commodity costs, O&M non-commodity costs, franchise fees on commodity costs, pass-through taxes, and balancing account costs are utilized in the working cash computation. See line 7 of Tables SDG&E-SPD-2, SDG&E-SPD-3, and SDG&E-SPD-4 or my workpaper (Ex. SDG&E-36-WP), Schedules B-1, B-2, and B-3, for more detail.

a. TY Forecasted Commodity Costs - For commodity costs, 2016 actual weighted-average lag days are applied to forecasted 2016 costs. See line 3b of Table SDG&E-SPD-2, line 4b of Table SDG&E-SPD-3, and line 5b of Table SDG&E-SPD-4.

Those costs include:

- Forecasted gas service costs are computed by multiplying the forecasted 2019 monthly demand by the monthly weighted-average cost of gas (WACOG). The monthly WACOG reflects purchase and interstate transportation costs.
- Purchased electric costs are based on SDG&E's resource planning forecast.

b. Other TY Non-Commodity Costs - The 2016 overall weighted-average number of lag days for expenses excluding commodities is applied to projected test year O&M expenses. This category includes non-commodity O&M expenses, deferred income taxes, franchise fees on commodity, pass-through taxes, and refundable program costs. See line 6b of Tables SDG&E-SPD-2, SDG&E-SPD-3, and SDG&E-SPD-4.

V. CONCLUSION

The foregoing testimony describes the methodology used by SDG&E to prepare its GRC request for working cash in compliance with SP U-16, based on 2016 as-recorded costs and TY 2019 forecasts. This testimony relies on SP U-16 as a guide to construct and present SDG&E's working cash requirements, and also presents the major drivers impacting the calculation.

My testimony demonstrates how balance sheet items contribute a total of \$40.7 million and the lead/lag analysis contributes an additional \$134.4 million towards SDG&E's forecasted

1 2019 working cash requirement. Finally, my testimony illustrates how the resulting working
2 cash requirement is allocated between electric distribution, gas service, and generation.

3 This effort resulted in a total TY 2019 working cash request requirement for SDG&E of
4 \$175.1 million, which is reasonable and appropriate.

5 This concludes my direct testimony.
6

1 **VI. WITNESS QUALIFICATIONS**

2 My name is Steven P. Dais. I am employed by SDG&E as the Operational and Capital
3 Budgets Manager in the Financial Planning & Budgets area. My business address is 8330
4 Century Park Court, San Diego, California 92123.

5 My principal responsibilities include managing the operating cost and capital budgets for
6 SDG&E.

7 I possess a Bachelor of Arts degree in Accounting and Economics from Luther College
8 and a Master of Business Administration from the University of Iowa. I worked for the public
9 accounting firms of Greenwood & Crim, LLC, and Clifton Gunderson, LP from 1995 until 1999,
10 when I acquired my CPA license. Since 1999 I have held a variety of accounting and planning
11 positions at Sempra Energy and SDG&E.

12 I have previously testified before the Commission.

APPENDIX A - [GLOSSARY OF TERMS]

Glossary of Terms

ADIT:	Accumulated Deferred Income Tax
A/R:	Accounts Receivable
CA:	California
CAC:	Customer Advances for Construction
CAISO:	California Independent System Operator
CPUC:	California Public Utilities Commission
Ex.:	Exhibit
FICA:	Federal Insurance Contributions Act
FUTA:	Federal Unemployment Tax Act
GRC:	General Rate Case
ICP:	Incentive Compensation Plan
NOI:	Notice of Intent
OASDI:	Old Age, Survivors, And Disability Insurance
O&M:	Operations and Maintenance
PBOPs:	Postretirement Benefits Other Than Pension
PLPD:	Public Liability and Property Damage
SDG&E:	San Diego Gas & Electric Company
SCG:	Southern California Gas Company
SP:	Standard Practice
SUI:	State Unemployment Insurance
TY:	Test Year
WACOG:	Weighted Average Cost of Gas
WP:	Workpaper

SDG&E 2019 GRC Testimony Revision Log – December 2017

Exhibit	Witness	Page	Line	Revision Detail
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-ii</i>		<i>Changed “\$178 million” to “\$175 million”</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-1</i>	<i>11</i>	<i>Changed “\$178 million” to “\$175 million”</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-1</i>		<i>Removed footnote 1) A late reduction in SDG&E’s proposed TY 2019 revenue requirement is reflected in the Summary of Earnings testimony of Khai Nguyen (SDG&E-42). Due to the timing of the TY 2019 revenue requirement change, SDG&E has updated only certain witness testimonies to reflect this reduction prior to filing its application. SDG&E’s Working Cash testimony proposal has not yet been updated to reflect this reduction. The Working Cash revenue requirement reduction will be provided and updated in the testimony and workpapers at SDG&E’s earliest opportunity.</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-1</i>	<i>14 - 16</i>	<i>Revised table. Changed “\$137” to “\$134”</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-1</i>	<i>14 - 16</i>	<i>Revised table. Changed “\$234” to “\$231”</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-1</i>	<i>14 - 16</i>	<i>Revised table. Changed “\$178” to “\$175”</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-5</i>		<i>Revised Table SDG&E-SPD-1. Lines 8, 11, 19, 21, and 22 updated.</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-6</i>	<i>2</i>	<i>Changed “\$95.3” to “\$92.4”</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-6</i>		<i>Revised Table SDG&E-SPD-2. Lines 6, 7, 8, and 9 updated.</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-7</i>		<i>Revised Table SDG&E-SPD-3. Lines 6, 7, 8, and 9 updated.</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-9</i>	<i>3</i>	<i>Changed “\$127.9” to “\$125.1”</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-9</i>	<i>4</i>	<i>Changed “\$30.8” to “\$30.7”</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-9</i>		<i>Revised Table SDG&E-SPD-5. Lead/Lag Working Capital Requirement and Line 10 updated.</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-10</i>		<i>Revised Table SDG&E-SPD-6. Lead/Lag Working Capital Requirement and Line 10 updated.</i>

Exhibit	Witness	Page	Line	Revision Detail
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-11</i>		<i>Revised Table SDG&E-SPD-7. Lead/Lag Working Capital Requirement and Line 10 updated.</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-19</i>	<i>31</i>	<i>Changed “\$137.3” to “\$134.4”</i>
<i>SDGE-36</i>	<i>Steve Dais</i>	<i>SPD-20</i>	<i>4</i>	<i>Changed “\$178.0” to “\$175.1”</i>