Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2016 General Rate Case
Application: A.14-11-XXX
Exhibit: SDG&E-30

SDG&E

DIRECT TESTIMONY OF JACK S. LEWIS

(WORKING CASH)

November 2014

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

SDGE
A Sempra Energy utility®

TABLE OF CONTENTS

APPENDIX

SDG&E DIRECT TESTIMONY OF JACK S. LEWIS
(WORKING CASH)

I. SUMMARY OF REQUEST

My testimony describes the methodology used by San Diego Gas & Electric Company ("SDG&E") to prepare its working cash request and provides the facts supporting a working cash requirement of $141.8 million to compensate investors for providing funds that are committed to the business for paying operating expenses in advance of receipt of the offsetting revenues from customers. As described in further detail below, my showing is mainly based on SDG&E's working cash study and the resulting Test Year ("TY") 2016 working cash requirement.

II. METHODOLOGY

Generally, customer rates are calculated based upon an authorized revenue requirement. Rate structures assume that revenues are collected as soon as services are rendered and expenses are paid when incurred. However, in reality, customers pay their bills after they receive services, and on average, SDG&E pays its suppliers after expenses are incurred. The net outcome of the timing of these transactions results in SDG&E's average revenue lag being greater than its average expense lag by 13.1 days. Consequently, SDG&E's investors fund the operating cash required during the net lag days (i.e., the gap in time before the revenues are collected from customers).

Working cash is the capital supplied by shareholders to meet day-to-day utility operational requirements and provides the bridge from the time the expenditures are made for services until the time revenues are collected for those services. SDG&E's determination of working cash consists of a detailed analysis normally referred to as the "weighted average or lead-lag days" method.[1]

SDG&E's working cash allowance is comprised of items related to the income statement and items related to the balance sheet. The requested working cash allowance for income statement items quantifies the timing lag between:

[1] As reflected in the CPUC Standard Practice U-16-W, March, 2006, 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.

A. when revenues are recognized in the GRC's summary of earnings for ratemaking purposes compared to when revenues are actually collected; and

B. when expenses are recorded on the company's income statement compared to when expenses are actually paid.

Balance sheet items include accounts funded with cash supplied by investors, such as other receivables and prepaid expenses (e.g., prepaid rent and insurance) as well as accounts that offset working cash requirements because they are funded with cash supplied by others (e.g., employee withholdings and other liabilities funded by ratepayers).

Tables SDG&E-JSL-4 and SDG&E-JSL-5 summarize the net working cash capital required for recorded year 2013 and TY 2016. I have included in my lead/lag study expenses charged to and forecasted for balancing accounts authorized by the CPUC for energy commodities and customer service programs that have no separate provision for working cash of their own. This is appropriate because interest is not applied to balancing accounts during the net revenue lag period. Therefore, since interest is not being accrued until the time point these amounts are included into the balancing accounts, they are appropriately included as part of the lead/lag study up until the time-point that these amounts start receiving the balancing account rate of return. This is consistent with the CPUC's Standard Practice U-16[2] (March 2006), which directs the exclusion of interest bearing amounts from the study and the operational requirements. The rationale is that if a return is being earned (an interest rate being applied), then another duplicative return or treatment on the same amount would not be appropriate.

III. WORKING CASH DETERMINATION

Determining SDG&E's working cash requirement involved several steps. First, the "operational" cash requirement is determined by examining certain asset accounts on the balance sheet. Deductions are made for certain liabilities, such as tax accruals and other funds, which represent cash provided from sources other than investors. Then, SDG&E prepared the "lead/lag" study which focuses on the income statement. The total of the "operational" (balance sheet) requirement is added to the "lead/lag" study requirement to produce the total working cash

[2] CPUC Standard Practice U-16-W, March, 2006, "On the other hand, the amount subtracted from the operational cash requirement represents a source of interest-free working funds available to the utility due to the fact that revenues are collected prior to the payment of employees' wages, taxes and the utility's creditors" (see pages 1-3). Additionally this theme of not including interest-bearing amounts is reflected under the "Customers' Deposits" heading, "Only noninterest-bearing customer deposits are to be considered." (see pages 1-8), clearly reinforcing the theme of excluding amounts that are interest bearing.

requirement. SDG&E's investors receive an authorized rate of return on their investment to fund SDG&E's working cash requirements just as they do for rate base.[3] Below, my testimony describes in greater detail this process and the various components that produce the forecast of SDG&E's working cash requirement for the TY 2016.

The following narrative generally describes the steps used to prepare the working cash study that determined SDG&E's TY 2016 request. More details on each account category and specifics relevant to each step in the process are provided later in this testimony, as well as in the accompanying workpapers (Ex. SDG&E-30-WP).

A. Working Cash Requirement for Balance Sheet Accounts

SDG&E's requested balance sheet-related working cash allowance is based on the sum of the monthly balances from December 2012 through December 2013, less one-half of each December balance, divided by 12 (i.e., a mid-month convention), and then escalated into 2016 dollar terms. This practice of averaging month-end balances for determining the balance sheet-related working cash allowance is outlined in Chapter 3 of CPUC Standard Practices U-16.

Working cash requirements for balance sheet accounts that require and provide working cash were quantified using 2013 as-recorded account balances and a mid-month convention as described above, to determine weighted-average annual account balances (see Tables SDG&E-JSL-4 and SDG&E-JSL-5). These balances were allocated between electric distribution and gas services based on the allocation percentages described in the Segmentation and Re-Assignment Rates testimony of Jeff Stein (Ex. SDG&E-41). SDG&E used different segmentation rates in the study: warehousing (82.3% electric, 15.1% gas); salaries (62.8% electric, 24.7% gas); wildfire insurance (83.5% electric, 0% gas); and rents (62.2% electric, 24.7% gas). The 2013 electric distribution and gas service average balances were then escalated to 2016 dollars using the shared services escalation factor index (1.0691), which reflects the weighted-average of labor and non-labor O&M indexes, as noted in the Escalation testimony of Scott R. Wilder (Ex. SDG&E-33).

[3] Determination of Working Cash Allowance, CPUC Standard Practice U-16-W, March, 2006 ("Its purpose is to compensate investors for funds provided by them which are permanently committed to the business for the purpose of paying operating expenses in advance of receipt of offsetting revenues from its customers and in order to maintain minimum bank balances.").

B. Working Cash Requirements for Income Statement Accounts

Working cash requirements for income statement accounts were determined by performing a lead/lag study. The lead/lag study consists of two major components: revenue lag and expense lag.

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-JSL-2 and SDG&E-JSL-3). 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-JSL-l). Because SDG&E pays separately for each categories of service, each expense category has its own value for lead/lag days.

3. Method

The expense lag analysis reflects 2013 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 2013 for account categories which represent the types of expenses forecasted in the GRC (e.g., accounts payable records, operations and maintenance expenses, payroll expense, taxes, and benefits, among others). The weighted-average number of expense lag days for each category was derived by the following:

- identifying the lag days for each payment within the total population of invoices for 2013 by comparing the service date (defined as either the date service was provided or the midpoint of the service period) to the date cash payment was made;
- multiplying the lag days for each payment by the dollar amount of each payment to get "dollar days"; and
- summing the dollar days for each payment and dividing that total by the total of the 2013 payment amounts (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).

The account category totals were associated with electric distribution and gas service based on the segmentation factors described in the testimony of Jeff Stein (Ex. SDG&E-41).

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

- annual 2013 electric distribution and gas service expenses for each account category were multiplied by total lag days, generating dollar-days (columns c and e in Table JSL-SDG&E-1);
- dollar-days and total expenses for all account categories except commodities were summed; and
- total dollar-days were divided by total expenses to determine non-commodity weighted-average lag days (lines 20b & 20d of Table SDG&E-JSL-1).

To generate dollar days on non-commodity expenses, I used weighted-average lag days and multiplied them by the sum of the total 2016 O&M costs forecasted in the GRC, forecasted deferred taxes, franchise fees on commodities, pass-through taxes, and refundable program costs (represented as All Other Expenses on line 5 of Tables SDG&E-JSL-2 and SDG&E-JSL-3). For commodity purchases, specific, rather than weighted-average expense lag days were applied to the forecasted dollars to generate dollar-days.

The sum of the Commodity and All Other Expenses dollar-days were divided by total forecasted expenses to determine overall weighted-average expense lag days (line 6 of Tables SDG&E-JSL-2 and SDG&E-JSL-3).

In the last step of the lead lag study, overall weighted-average expense lag days for electric distribution and gas service were subtracted from revenue lag days to produce net revenue lag days (line 7 of Tables SDG&E-JSL-2 and SDG&E-JSL-3), which is the average number of days between payment of expenses and collection of revenue. This value was then multiplied by total forecasted expenses and divided by 365 days to determine the total working cash requirement associated with revenue and expenses (line 8 of Tables SDG&E-JSL-2 and SDG&E-JSL-3).

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 and gas service (line 9 of Tables SDG&E-JSL-4 and SDG&E-JSL-5).

IV. SUMMARY REPORTS

Table SDG&E-JSL-1 summarizes 2013 expense lag days, commodity expenses, non-commodity expenses, and associated dollar-days by account category for electric distribution and gas service. The overall 2013 weighted-average non-commodity expense lag days are 21.6 days for electric distribution and 26.9 days for gas service. These values were developed to apply to 2016 expense forecasts.

Table SDG&E-JSL-1
San Diego Gas & Electric Company
2013 Expense Lag Days Summary – Electric Distribution and Gas Service Expenses
($000)

Line No.	Description	[a] Expense Lag Days	[b] Total Company Electric Distribution Expenses	[c] Total Company Electric Distribution Dollar-Days [a]*[b]	[d] Total Company Gas Service Expenses	[e] Total Company Gas Service Dollar-Days [a]*[d]
	Commodity Expense:					
1	Purchased Electric Costs	36.10	$ 777,851	$ 28,080,409	-	-
2	Purchased Gas Costs	37.67	-	-	$ 479,441	$ 18,060,553
	Non-Commodity Expense:					
3	Payroll Expense	13.02	181,588	2,364,182	71,398	929,566
4	F.I.C.A. & Medicare Expense	12.42	12,847	159,596	5,051	62,751
5	Federal/State Unemployment Insurance	76.05	295	22,429	116	8,819
6	Incentive Compensation Plan	256.00	16,299	4,172,459	6,408	1,640,556
7	Employee Benefits	5.12	90,830	465,047	35,713	182,850
8	Goods & Services	30.70	278,627	8,553,852	109,553	3,363,262
9	Payments by Corporate Center	11.88	114,400	1,359,069	44,980	534,368
10	Real Estate Rental	(13.52)	14,764	(199,614)	5,863	(79,268)
11	Materials Issued from Stores	-	5,335	-	979	-
12	Property/Ad Valorem/Pass-Through Taxes	86.34	153,904	13,288,101	60,513	5,224,707
13	Federal Income Taxes--Current	-	-	-	-	-
14	CA Corporate Franchise Taxes	(407.12)	13,745	(5,595,980)	5,404	(2,200,266)
15	Depreciation Provision	-	246,144	-	31,899	-
16	Amortization of Insurance Premiums	-	66,068	-	25,977	-
17	Federal Income Taxes - Deferred	-	(54,929)	-	(44,463)	-
18	**EXPENSES EXCLUDING COMMODITY**		**$ 1,139,917**	**$ 24,589,141**	**$ 359,392**	**$ 9,667,345**
19	**TOTAL EXPENSES INCLUDING COMMODITY**		**$ 1,917,767**	**$ 52,669,550**	**$ 838,834**	**$ 27,727,898**
20	**Weighted Average Non-Commodity Expense Lag Days**		**21.57**	[18c/18b]	**26.90**	[18e/18d]
21	**Weighted Average Expense Lag Days (including Commodity)**		**27.46**	[19c/19b]	**33.06**	[19e/19d]

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

Tables SDG&E-JSL-2 and SDG&E-JSL-3 summarize 2013 revenue lag days; weighted-average expense lag days for energy commodity and non-commodity account categories; 2016 forecasted commodity and non-commodity expenses; associated dollar-days; overall weighted-average expense lag days; net revenue lag days; and the resulting total 2016 lead/lag working cash requirement of $96.4 million for electric distribution and $16.1 million for gas service.

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

Line No.	Description	[a] 2013 Expense Lag Days	[b] 2016 Expense Forecast	[c] 2016 Calculated Dollar-Days [a]*[b]
1	**Revenue**	40.35		
2	**Expenses**			
3	Commodity Purchases - Core Gas	37.67	-	-
4	Commodity Purchases - Electric	36.10	$ 1,097,849	$ 39,632,343
5	All Other Expenses	21.57	1,625,892	35,072,111
6	Total Expenses - a: c/b; b&c: (3+4+5)	27.43	$ 2,723,741	$ 74,704,454
7	**Net Revenue Lag Days** [1a-6a] *	12.92		
8	**Total Lead-Lag Working Cash Requirement** [6b*7a/365]		**$ 96,445**	

Note: Values may not add to totals due to rounding.
* Represents 2016 net revenue lag days based on 2016 expense forecasts.

Table SDG&E-JSL-3
San Diego Gas & Electric Company
Lead-Lag Study Summary – Gas Services
($000)

Line No.	Description	[a] 2013 Expense Lag Days	[b] 2016 Expense Forecast	[c] 2016 Calculated Dollar-Days [a]*[b]
1	**Revenue**	40.35		
2	**Expenses**			
3	Commodity Purchases - Core Gas	37.67	$ 432,362	$ 16,287,083
4	Commodity Purchases - Electric	36.10	-	-
5	All Other Expenses	26.90	350,145	9,418,584
6	Total Expenses - a: c/b; b&c: (3+4+5)	32.85	$ 782,507	$ 25,705,668
7	**Net Revenue Lag Days** [1a-6a] *	7.50		
8	**Total Lead-Lag Working Cash Requirement** [6b*7a/365]		**$ 16,081**	

Note: Values may not add to totals due to rounding.
* Represents 2016 net revenue lag days based on 2016 expense forecasts.

Tables SDG&E-JSL-4 and SDG&E-JSL-5 summarize 2013 and forecasted 2016 balance sheet sources and uses of working cash, lead/lag working cash requirements, and total working cash requirements of $124.1 million for electric distribution and $17.7 million for gas service.

Table SDG&E-JSL-4
San Diego Gas & Electric Company
Working Cash Summary – Electric Distribution
($000)

Line No.	Description	2013 As-Recorded	2016 Requirement
	Balance Sheet Account Uses of Working Cash		
1	Cash Balances	$ 2,856	$ 3,054
2	Other Receivables	12,890	13,780
3	Prepayments and Current Assets	39,265	41,978
4	Deferred Debits	3,795	4,058
5	Sub-total Balance Sheet Account Uses of Working Cash	58,806	62,869
	Balance Sheet Account Sources of Working Cash		
6	Employee Withholdings	(996)	(1,065)
7	Current and Accrued Liabilities	(31,936)	(34,142)
8	Sub-total Balance Sheet Account Sources of Working Cash	(32,932)	(35,208)
9	**Net Balance Sheet Account Working Cash Requirement** [5+8] *	$ 25,874	$ 27,662
	Lead/Lag Working Capital Requirement **		$ 96,445
10	**Total Working Cash Requirement**		**$ 124,107**

* Proposed 2016 amount is derived by escalating the 2013 recorded value using the shared service index.

** Proposed 2016 working cash requirement is from the previous table (Table SDG&E-JSL-2).

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

Table SDG&E-JSL-5
San Diego Gas & Electric Company
Working Cash Summary – Gas Services
($000)

Line No.	Description	2013 As-Recorded	2016 Requirement
	Balance Sheet Account Uses of Working Cash		
1	Cash Balances	$ 1,123	$ 1,201
2	Other Receivables	5,068	5,418
3	Prepayments and Current Assets	6,769	7,237
4	Deferred Debits	1,492	1,595
5	Sub-total Balance Sheet Account Uses of Working Cash	14,453	15,451
	Balance Sheet Account Sources of Working Cash		
6	Employee Withholdings	(392)	(419)
7	Current and Accrued Liabilities	(12,557)	(13,424)
8	Sub-total Balance Sheet Account Sources of Working Cash	(12,948)	(13,843)
9	**Net Balance Sheet Account Working Cash Requirement** [5+8] *	$ 1,504	$ 1,608
	Lead/Lag Working Capital Requirement **		$ 16,081
10	**Total Working Cash Requirement**		**$ 17,689**

* Proposed 2016 amount is derived by escalating the 2013 recorded value using the shared service index.
** Proposed 2016 working cash requirement is from the previous table (Table SDG&E-JSL-3).
Note: Values may not add to totals due to rounding.

V. WORKING CASH DETAIL

This section contains further details about each account category used in the development of SDG&E's 2016 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-30-WP).

1. Operational Cash Requirements

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

a. Cash Balance (line 1 of Tables SDG&E-JSL-4 and SDG&E-JSL-5) – 2013 average actuals of $2.9 million for electric distribution and $1.1 million for gas service. The cash balance represents working cash on hand that is required to be available in the bank accounts to operate SDG&E's bank accounts economically and efficiently. The amounts fluctuate depending upon anticipated cash outlays and inflows.

b. Other Receivables (line 2 of Tables SDG&E-JSL-4 and SDG&E-JSL-5) – 2013 average actuals of $12.9 million electric distribution and $5.1 million gas service. This category includes Sundry Billing, Damage Claims Receivables, and Miscellaneous Receivables.

- 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 and Current Assets (line 3 of Tables SDG&E-JSL-4 and SDG&E-JSL-5) – 2013 average actuals of $39.3 million electric distribution and $6.8 million gas service. 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.

d. Deferred Debits (line 4 of SDG&E-JSL-4 and SDG&E-JSL-5) – 2013 average actuals $3.8 million electric distribution and $1.5 million gas service. This account reflects preliminary survey and investigation costs which are costs incurred for potential capital projects before they are added to rate base.

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 (line 6 of Tables SDG&E-JSL-4 and SDG&E-JSL-5) – 2013 average actuals of ($1.0) million electric distribution and ($0.4) million gas service. This category includes the employee paid portion of benefit costs and taxes.

b. Current and Accrued Liabilities (line 7 of Tables SDG&E-JSL-4 and SDG&E-JSL-5) – 2013 average actuals of ($31.9) million electric distribution and ($12.6) million gas service. These line items include the following items (among others):

- 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 in order to be in accordance with the deductions outlined in Chapter 3 of Standard Practice U-16. However, SDG&E does not agree with the inclusion that is outlined by CPUC Standard Practice U-16. This is because no funding is requested in the GRC for accrued vacation. GRC forecasted total labor expenses are based on actual productive labor plus an overhead rate that is determined solely from actual expenses, not liability accruals. Liabilities are maintained on the balance sheet for financial reporting purposes, but only actual expenses are proposed in the GRC forecast. Employees are paid for 2,080 working hours per year whether they take vacation or not and that is reflected in rates; therefore, there is no working cash benefit being derived.

- 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.

- Customer Deposits are excluded as a working cash item because CPUC Standard Practice U-16 directs that "[o]nly noninterest-bearing customer deposits are to be considered."[4] SDG&E pays interest at the Federal Reserve published prime non-financial 3-month commercial paper rate on these balances. This treatment is consistent with CPUC Standard Practice U-16 and SDG&E's prior GRC in 2012 whereby SDG&E's working cash requirement excluded Customer Deposits based on the same rationale and precedent. Furthermore, the Customer Deposit balances are not permanent in nature and they can and do fluctuate depending upon the economy

[4] CPUC Standard Practice U-16-W, March, 2006, (chapter 3, pgs. 1-8).

and building demand. 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.

- Smart Meters - SDG&E's Smart Meters have been fully deployed prior to 2013 and consequently no adjustment is appropriate since the benefits of Smart Meters are already reflected in the 2013 actual revenue lags.

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

1. Revenue Lag (line 1 of Tables SDG&E-JSL-2 and SDG&E-JSL-3)

2013 actual of 40.35 days. Overall, revenue lag decreased, primarily due to a decrease in collection lag. The collection lag is shown on workpaper (Ex. SDG&E-30-WP) Schedule C and uses the "accountants receivable" method as outlined in Chapter 3 of CPUC Standard Practice U-16. The table below illustrates how total revenue lag days were derived:

• Collection Lag	21.87 days
• Meter Reading Lag	2.39 days
• Billing Lag	15.21 days
• Bank Lag	.88 days
• Total Revenue Lag	40.35 days

a. Collection lag days are based upon an analysis of A/R balances and revenues for 2013. 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 2013 that resulted in 2.39 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 15.21 days.

d. Bank lag reflects the amount of days from the bank inflow until those funds become available.

2. 2013 Expense Lag Categories

a. Purchased Commodities, Electric Generation (line 1 of Table SDG&E-JSL-1) – 2013 actuals of $777.9 million, 36.10 lag days. 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 in order to recover a working cash allowance for the net revenue lag associated with commodity purchases. Please see my workpaper (Ex. SDG&E-30-WP) Schedule D-2 for more detail. Components include:

- Electric Purchases (Non- California Independent System Operator ["CAISO"]): 42.5 days and reflect electric purchases outside of CAISO.

- Electric Purchases (CAISO): 13.3 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-30-WP) Schedule D for more detail.

- Option Premiums: (370.2) 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 (line 2 of Table SDG&E-JSL-1) – 2013 actuals of $479.4 million, 37.67 lag days. 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 in order to recover a working cash allowance related to the net revenue lag associated with commodity purchases. The 2013 purchased gas costs were derived by summing the payments made each month. Lag days reflect the weighted-average of all net 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. Please see my workpaper (Ex. SDG&E-30-WP) Schedule D-1 for more detail.

c. Payroll Expense (line 3 of Table SDG&E-JSL-1) – 2013 actuals of $181.6 million electric distribution and $71.4 million gas service, 13.0 lag days. This category includes

Operations & Maintenance (O&M) and the O&M portion of clearing and refundable labor costs as detailed in the first three lines of Schedule E and is 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, and therefore the resulting net lag is 13.0 lag days. Please see my workpaper (Ex. SDG&E-30-WP) Schedule E for more detail.

d. Federal Insurance Contributions Act Tax ("FICA") (line 4 of Table SDG&E-JSL-1) – 2013 actuals of $12.8 million electric distribution and $5.1 million gas service, 12.4 lag days. 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. Please see my workpaper (Ex. SDG&E-30-WP) Schedule F for more detail.

e. Federal Unemployment Tax Act ("FUTA") and State Unemployment Insurance ("SUI") (line 5 of Table SDG&E-JSL-1) – 2013 actuals of $0.3 million electric distribution and $0.1 million gas service, 76.1 lag days. 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. Please see my workpaper (Ex. SDG&E-30-WP) Schedule F for more detail.

f. Variable Pay / Incentive Compensation Plan ("ICP") (line 6 of Table SDG&E-JSL-1) – 2013 actuals of $16.3 million electric distribution and $6.4 million gas service, 256.0 lag days. This compensation is earned and reflected as an expense in the preceding year (2013), but paid out in 2014. Please see my workpaper (Ex. SDG&E-30-WP) Schedule G for more detail.

g. Employee Benefits (line 7 of Table SDG&E-JSL-1) – 2013 actuals of $90.8 million electric distribution and $35.7 million gas service, 5.1 lag days. Please see my workpaper (Ex. SDG&E-30-WP) Schedule H for more line item details.

- For both Pensions and Post-Retirement Benefits Other Than Pensions, ratepayers are compensated for the actual payment lags since this account is balanced. As noted above, it is an established working cash principle that a zero lag day is proper in the case of accrued expenses for which interest is paid on the accumulated balance.

h. Goods and Services (line 8 of Table SDG&E-JSL-1) – 2013 expense of $278.6 million electric distribution and $109.6 million gas service, 30.7 lag days. The Goods and

Services expense amount includes other expenses that have not been identified separately on the lead lag study. Please see my workpaper (Ex. SDG&E-30-WP) Schedule I for more detail.

i. Payments by Corporate Center (line 9 of Table SDG&E-JSL-1) – 2013 actuals of $114.4 million electric distribution and $45.0 million gas service, 11.9 lag days. SDG&E pays for its share of expenses incurred by Corporate Center on behalf of the utility. The lead/lag days from corresponding expense categories in this lead/lag study are applied to Corporate Center payments to calculate overall lag days. Please see my workpaper (Ex. SDG&E-30-WP) Schedule J for more detail.

j. Real Estate Lease Payments (line 10 of Table SDG&E-JSL-1) – 2013 actuals of $14.8 million electric distribution and $5.9 million gas service, (13.5) lead days. Real Estate Leases are typically paid in advance and include such leases as office space, easements, and communication sites. Almost all of 2013 lease payment dollars were paid monthly. Overall expense lag is negative because payments are made prior to the midpoint of the occupancy period. Please see my workpaper (Ex. SDG&E-30-WP) Schedule K for more detail.

k. Materials Issued from Stores (line 11 of Table SDG&E-JSL-1) – 2013 actuals of $5.3 million electric distribution and $1.0 million gas service, 0.0 lag days. This category includes materials issued for Operations & Maintenance. Please see my workpaper (Ex. SDG&E-30-WP) Schedule L for more detail.

l. Property/Ad Valorem/Pass-through Taxes (line 12 of Table SDG&E-JSL-1) – 2013 actuals of $153.9 million electric distribution and $60.5 million gas service ($214.4 million total), 86.3 lag days. Most of these payments are made electronically. Please see my workpaper (Ex. SDG&E-30-WP) Schedule Ma and Mb for more detail. This category includes property/ad valorem taxes, franchise fees, and pass through taxes collected on behalf of government agencies.

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

m. Federal Income Taxes, Current (line 13 of Table SDG&E-JSL-1) – Tax expense lags are based on statutory due dates: April 15 of each year for the first quarter, June 15 for the second quarter, September 15 for the third quarter, and December 15 for the fourth quarter. The tax lag days of each payment are calculated between the midpoint of the year and the wire payment date. No Federal Income Taxes were paid in 2013 due to SDG&E's net operating loss tax position.

n. California Corporate Franchise Taxes, Current (line 14 of Table SDG&E-JSL-1) – 2013 actuals of $13.7 million electric distribution and $5.4 million gas service, (407.1) lag days. Statutory due dates are the same as noted above for Federal Income Taxes and the method of calculating lag days is the same. California Franchise Taxes also include tax refunds of $25.5 million from previous periods with negative lag days of 532. Please see my workpaper (Ex. SDG&E-30-WP) Schedule N-2 for more detail. These were funds that were held by the state instead of SDG&E and therefore result in negative lag days.

o. Depreciation (line 15 of Table SDG&E-JSL-1) – 2013 actuals of $246.1 million electric distribution and $31.9 million gas service, 0.0 lag days. When properties are built, the cash cycle begins with cash outlays by investors and ends with cash recovery by investors through depreciation expense. In the interim, such funding is part of SDG&E's rate base. Depreciation expense reduces rate base, but SDG&E's recovery is delayed for the duration of the billing or revenue lag. Weighting these dollars at zero expense lag recognizes that the investor funding has occurred, but it has not been recovered and consistent with CPUC Standard Practice U-16 depreciation expense is given 0 lag days.[5] Please see my workpaper (Ex. SDG&E-30-WP) Schedule O-2 for more detail.

p. Amortization of Insurance Premiums (line 16 of Table SDG&E-JSL-1) – 2013 actuals of $66.1 million electric distribution and $26.0 million gas service, 0.0 lag days. SDG&E's insurance premiums are paid in advance and therefore result in a working cash need. Weighting these dollars at zero expense lag recognizes that the investor funding has occurred, but the funds have not been recovered. Amortization is weighted at zero expense lag for the

[5] 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." (Chapter 3 pg. 1-15 CPUC Standard Practice U-16)

same reason as previously described under Depreciation. Please see my workpaper (Ex. SDG&E-30-WP) Schedule O-3 for more detail.

q. Federal/State Income Taxes, Deferred (line 17 of Table SDG&E-JSL-1) – 2013 actuals of ($54.9) million electric distribution and ($44.5) million gas service, 0.0 lag days. This amount reflects the change of deferred federal and state taxes in 2013. Accumulated deferred income taxes ("ADIT") are deducted from rate base as cost-free funds available for investment. However, the financial recording of deferred income taxes does not produce cost-free capital and the funds do not become available until customers pay their bills. Therefore, the recorded amount of ADIT overstates the actual amount of cost-free funds that are available. The inclusion of deferred income taxes at zero lag days in the overall expense lag weighted-average corrects this condition, in the same manner as depreciation, described above. Please see my workpaper (Ex. SDG&E-30-WP) Schedule O-1 for more detail.

3. TY 2016 Expense Components (line 6 of Tables SDG&E-JSL-2 and SDG&E-JSL-3)

TY 2016 forecast of $2,723.7 million for electric distribution and $782.5 million for gas service. 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. Please see my workpaper (Ex. SDG&E-30-WP) Schedule B-1 and B-2 for more detail.

a. TY Forecasted Commodity Costs (line 4b of Table SDG&E-JSL-2, and line 3b of Table SDG&E-JSL-3) – $1,097.8 million electric distribution, $432.4 million gas service. For commodity costs, 2013 actual weighted-average lag days are applied to forecasted 2016 costs. Those costs include:

- Forecasted gas service costs are computed by multiplying the forecasted 2016 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 (line 5b of Tables SDG&E-JSL-2 and SDG&E-JSL-3) – $1,625.9 million and 21.6 lag days for electric distribution, $350.1 million and 26.9 lag days for gas service. The 2013 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.

VI. CONCLUSION

The foregoing testimony describes the methodology used by SDG&E to prepare its GRC request for working cash in compliance with CPUC Standard Practice U-16, based on 2013 as-recorded costs and TY 2016 forecasts. This effort resulted in a total 2016 working cash request requirement for SDG&E of $141.8 million – $124.1 million for electric distribution and $17.7 million for gas service. This testimony focuses on the major drivers and relies on Standard Practice U-16 as a guide to construct and present SDG&E's working cash requirements. My testimony also shows how balance sheet items account for $27.7 million of SDG&E's total of $124.1 million forecasted 2016 electric distribution working cash requirements and for $1.6 million out of a total of $17.7 million of 2016 gas working cash requirements. Additionally, my testimony shows that lead/lag categories with expense lags less than revenue lag consume working cash. Accordingly, as shown above, in the lead/lag study they lower the overall weighted average for expense lag days and result in net revenue lag days. Such items in SDG&E's 2013 study include depreciation expense, Federal Income Taxes, California State Franchise Taxes, goods and services, payroll expenses, and gas and electric commodity costs. Lead/lag categories with expense lags greater than revenue lag provide working cash. These items raise the overall weighted average for expense lag days and decrease net revenue lag days. Such items in SDG&E's 2013 study include property/ad valorem and pass-through taxes, and incentive-based compensation payments for labor and Federal/State unemployment insurance. Ultimately, SDG&E's lead/lag study calculated an overall 2016 net revenue lag of 12.9 days for electric distribution and 7.5 days for gas service.

SDG&E's 2016 working cash request of $141.8 million, including $124.1 million for electric distribution and $17.7 million for gas service, is reasonable and appropriate.

This concludes my prepared direct testimony.

VII. WITNESS QUALIFICATIONS

My name is Jack S. Lewis. I am employed by SDG&E as the Financial Services Manager in the Financial Planning & Regulatory Accounts area. My business address is 8330 Century Park Court, San Diego, California 92123.

My principal responsibilities include Treasurer support, Regulatory and Finance support, business planning, forecasting and financial analysis.

I possess a Bachelor of Science degree in Business Administration from San Diego State University and a Master of Science from San Diego State University. I worked for the public accounting firm of Coopers & Lybrand from 1986 until 1988 where I acquired my CPA license. I have held a variety of financial and Treasury positions at Sempra Energy and Sempra Energy Utilities.

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