

Applications	:	<u>A.06-12-009 / 010</u>
Exhibit Number	:	<u>DRA-5-R</u>
Commissioner	:	<u>Bohn</u>
ALJ	:	<u>Long</u>
Witness	:	<u>Evans</u>



**DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION**

**Report on the Results of Operations
for
San Diego Gas & Electric Company
Southern California Gas Company
General Rate Case
Test Year 2008**

**SDG&E Electric Generation and SONGS
Operation & Maintenance Expenses
and Capital Expenditures**

San Francisco, California
August 15, 2007

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CHAPTER 1

**SAN DIEGO GAS & ELECTRIC COMPANY
ELECTRIC GENERATION
OPERATION AND MAINTENANCE EXPENSES
AND CAPITAL EXPENDITURES**

I. INTRODUCTION

This chapter presents the analysis and recommendations of DRA for San Diego Gas & Electric Company's (SDG&E) Palomar and Miramar natural gas fired electric generation facilities, for both operation and maintenance (O&M) expenses and capital expenditures. Generation O&M expenses accumulate in FERC Accounts 500 through 514 and 546 through 554. These were evaluated by DRA on an account-by-account basis.

SDG&E's interest in the San Onofre Nuclear Generation Station (SONGS) is the subject of Chapter 2 of this exhibit.

II. SUMMARY OF RECOMMENDATIONS

The following summarizes DRA's recommendations:

- DRA accepts SDG&E's forecasted electric generation O&M expense estimates for 2008.
- DRA recommends electric generation capital expenditures of \$469.1 million in 2006, \$11.0 million in 2007, and \$1.9 million in 2008.

Exhibit DRA-5-R (Revised August 15, 2007)

1 Table 5-1 compares DRA's recommended with SDG&E's proposed estimates
2 for Test Year (TY) 2008:

3 **Table 5-1**
4 **Electric Generation O&M Expenses for 2008**
5 **(in Thousands of 2005 Dollars)**

Description (a)	DRA Recommended (b)	SDG&E Proposed ¹ (c)	Amount SDG&E>DRA (d=c-b)	Percentage SDG&E>DRA (f=d/b)
Electric Generation O&M	\$17,510	\$17,510	\$ 0	0.00%

6
7 Table 5-2 compares DRA's recommended capital expenditures with SDG&E's
8 proposed estimates for 2006-2008:

9 **Table 5-2**
10 **Electric Generation Capital Expenditures 2006-2008**
11 **(in Thousands of 2005 Dollars)**

Year (a)	DRA Recommended (b)	SDG&E Proposed ² (c)	Amount SDG&E>DRA (d=c-b)	Percentage SDG&E>DRA (e=d/b)
2006	\$469,105	\$483,025	\$13,920	2.97%
2007	\$11,015	\$6,515	(\$4,500)	(40.85%)
2008	\$1,939	\$1,939	\$ 0	0.00%
Total	\$482,059	\$491,479	\$9,420	1.95%

12 13 **III. DISCUSSION / ANALYSIS of ELECTRIC GENERATION O&M** 14 **EXPENSES**

15 Other than its interest in the San Onofre Nuclear Generation Station
16 (SONGS), SDG&E divested all of its electrical generation facilities as part of the
17 deregulation of California's electric utilities in the 1990's. In the last two years,
18 SDG&E has re-entered the electric generation business with the acquisition of two
19 natural gas fired power plants: (1) Miramar, a 46 MW combustion turbine (CT) plant,
20 which became operational for SDG&E on July 26, 2005; and (2) Palomar, a 555 MW

¹ Exh.SDG&E-2, pg. DSB-2.

² Ibid.

Exhibit DRA-5-R (Revised August 15, 2007)

1 combined cycle (CC) plant, which became operational for SDG&E on March 30,
2 2006.³

3 Since these plants are so new, there is very little operational history on which
4 to base forecasts of future O&M expenses; since the plants are operated by a single
5 staff, with Miramar only run during peak load periods, the recorded O&M expenses
6 are not separated by plant. Therefore, it is difficult to rely on the 2006 historical
7 recorded expense (which is only a partial year for Palomar but a full year of
8 operation for Miramar) as a basis for determining expenses at either plant – at
9 Miramar, since its expenses are not separated out from Palomar, and at Palomar,
10 since its expenses do not record a full year of operation.

11 Despite these difficulties, DRA reviewed the adjusted-recorded 2005 and
12 2006 expenses for all relevant FERC accounts (500, 502, 505, 506, 507, 511, 512,
13 513, 514, 546, 549, 552, 553, and 554), and compared them to SDG&E's forecasted
14 2008 expenses. The total forecasted 2008 expense (in 2005 dollars) was \$17.51
15 million, which is actually less than the adjusted-recorded 2006 expense (in 2005
16 dollars) of \$18.363 million.⁴ Therefore, DRA does not take issue with SDG&E's
17 forecasted test year 2008 non-nuclear generation expense.

18 **IV. DISCUSSION / ANALYSIS of ELECTRIC GENERATION CAPITAL** 19 **EXPENDITURES**

20 SDG&E forecasts capital expenditures of \$483.0 million in 2006, \$6.5 million
21 in 2007, and \$1.9 million in 2008, as shown on Table 5-2.

22 Since Miramar became operational for SDG&E in 2005, the generation capital
23 expenditure for 2005 was predominantly the cost of acquiring Miramar (\$29 million
24 out of \$34 million total⁵). Similarly, the 2006 generation capital expenditure is

³ Ibid.

⁴ Excel File SDGE 2006 Adj_Rec Data.xls, tab SDGE NSS Adj Rec. This data needed to be sorted by witness (Baerman) and summed to calculate the \$18,363k.

⁵ Excel File SDGE_capex-2006_DRA.xls, tab General_esc.

Exhibit DRA-5-R (Revised August 15, 2007)

1 predominantly the cost of acquiring Palomar (\$467 million out of \$469 million total⁶).
2 SDG&E's 2006 adjusted-recorded capital expenditure for non-nuclear generation
3 was significantly less than the forecasted amount. The adjusted-recorded amount is
4 \$469.1 million,⁷ compared to the forecasted amount of \$483 million⁸ (including the
5 Palomar chiller project), or \$478.5 million⁹ without the chiller (all figures in 2005
6 dollars). DRA recommends adopting the adjusted-recorded figure for 2006 capital
7 expenditures.

8 Since the 2006 recorded adjusted expenditure did not include the Palomar
9 chiller project, which was forecasted at \$4.5 million in 2006 and \$5.5 million in
10 2007,¹⁰ DRA recommends that SDG&E's forecasted amount for 2007 be increased
11 by \$4.5 million, to \$11.0 million, to accommodate the chiller project. DRA accepts
12 SDG&E's capital expenditure of \$1.9 million for 2008.

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⁶ Ibid.

⁷ Ibid.

⁸ Exh.SDG&E-2, pg. DSB-2.

⁹ Ibid.

¹⁰ Ibid.

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CHAPTER 2

**SAN DIEGO GAS & ELECTRIC COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION
OPERATION AND MAINTENANCE EXPENSES
AND CAPITAL EXPENDITURES**

8 **I. INTRODUCTION**

9 This chapter presents DRA's analysis and recommendations regarding San
10 Diego Gas & Electric Company's (SDG&E) share of the San Onofre Nuclear
11 Generating Station (SONGS) operation and maintenance (O&M) expenses and
12 capital expenditures. SONGS O&M expenses accumulate in FERC's Nuclear Power
13 Generation Accounts 517 through 532. These were evaluated by DRA on an
14 account-by-account basis in another case (Application 04-12-014), and adjudicated
15 by the Commission in Decision (D.) 06-05-016. The results of that Decision are
16 carried over to this case, and are the basis of DRA's recommendation here.

17 Nuclear Power Generation expenses are the operation and maintenance
18 expenses of power generation facilities using nuclear reactors, including supervision
19 and engineering, expenses for nuclear fuel, coolant, steam, structures, plant
20 equipment, and miscellaneous. Operations expenses are recorded in accounts 517
21 through 525. Maintenance expenses are recorded in accounts 528 through 532.

22 Pursuant to D.06-11-026 (A.06-04-012), the Commission authorized SDG&E
23 to recover through a two-way balancing account the difference between authorized
24 and actual SONGS O&M costs. Therefore, any deviation from the adopted O&M
25 expenses will be captured in the balancing account.

26
27 **II. SUMMARY OF RECOMMENDATIONS**

28 The following summarizes DRA's recommendations:

- 29
- DRA accepts SDG&E's forecasted SONGS O&M expense estimates for
30 2008.

Exhibit DRA-5-R (Revised August 15, 2007)

- DRA recommends **no** adjustments to **SONGS capital expenditures for 2006-2008** of ~~\$20.3 million in 2006, \$21.0 million in 2007, and \$16.7 million in 2008.~~ The figure for 2006 is the adjusted recorded amount. The figures for 2007 and 2008 are based on Southern California Edison's (SCE) estimates for capital expenditures in its last GRC.

Table 5-3 compares DRA's recommended O&M expenses with SDG&E's proposed estimates for Test Year (TY) 2008 (no adjustment):

Table 5-3
SONGS O&M Expense for 2008
(in Thousands of 2005 Dollars)

Description (a)	DRA Recommended (b)	SDG&E Proposed ¹¹ (c)	Amount SDG&E>DRA (d=c-b)	Percentage SDG&E>DRA (e=d/b)
Operations	\$64,258	\$64,258	\$0	0.00%
Maintenance	\$23,942	\$23,942	\$0	0.00%
Total	\$88,200	\$88,200	\$0	0.00%

Table 5-4 compares DRA's recommended capital expenditures with SDG&E's proposed estimates for 2006-2008:

Table 5-4
SONGS Capital Expenditures 2006-2008
(in Thousands of 2005 Dollars)

Year (a)	DRA Recommended (b)	SDG&E Proposed ¹² (c)	Amount SDG&E>DRA (d=c-b)	Percentage SDG&E>DRA (e=d/b)
2006	\$25,600 20,300	\$25,600	\$ 0 5,300	26.11 0.00%
2007	\$26,200 21,000	\$26,200	\$ 0 5,200	24.76 0.00%
2008	\$26,900 16,700	\$26,900	\$ 0 10,200	61.08 0.00%
Total	\$78,700 58,000	\$78,700	\$ 0 20,700	35.69 0.00%

¹¹ Exh SDG&E-3, pg. MO-5, as modified by Exh SDG&E-3-WP, pg. MO-29, and reflected in Exh SDG&E-28, Appendix A, pgs 1,3, 4, & 9.

¹² Exh SDG&E-3, pg. MO-7.

Exhibit DRA-5-R (Revised August 15, 2007)

1 **III. DISCUSSION / ANALYSIS of SONGS O&M EXPENSES**

2 SONGS is a nuclear fueled electric generation power plant located on the
3 southern California coastline adjoining the Camp Pendleton U.S. Marine Corps
4 Base north of San Diego. Southern California Edison (SCE) is the operator and
5 primary owner of the plant, with an interest of over 75%. SDG&E owns a 20%
6 interest. The site contains three nuclear reactors – units 1, 2 and 3. Units 2 and 3
7 are currently in use with a combined rated capacity of 2,254 megawatts. Unit 1 was
8 retired in 1992 and is being decommissioned.

9 SDG&E forecasts SONGS O&M expenses of \$88.12 million in 2008, as
10 shown in Table 15-3.

11 Since SCE is the majority owner and operating agent of SONGS, SCE bills
12 SDG&E for 20% of the total capital expenditures and O&M expenses. In order to
13 ensure consistency of treatment of these expenditures, they are considered in SCE's
14 General Rate Cases. SCE's most recent rate case is A.04-12-014. Decision 06-05-
15 016 was rendered in that case on May 11, 2006. SDG&E's proportionate share of
16 the total SONGS capital expenditures and O&M expenses in this case is based on
17 the costs adopted in the SCE GRC.

18 Since D.06-05-016 set the 100% level of SONGS O&M expenses, and
19 SDG&E's figures are derived from those authorized levels, DRA agrees to SDG&E's
20 SONGS O&M expense request. Included in SDG&E's application, but not based on
21 the SCE Decision, are two additional SONGS expenses - \$0.948 million for SONGS
22 Unit 1 spent fuel storage and \$0.020 million for land lease. As in previous SDG&E
23 GRCs, DRA accepts these expenses.

24 The future expenses of the SONGS Steam Generator Replacement Project,
25 which are the subject of separate proceedings, are not included in this GRC.

26 D.06-05-016 also established a new mechanism for setting SONGS refueling
27 outage expenses, which vary widely depending on how many refueling projects are
28 done in a given year. The SCE GRC decision set an expense amount for each
29 refueling outage, to be applied as many times per year as appropriate (zero, one, or
30 two). SDG&E's Advice Letter 2103-E, dated February 15, 2007, documented the
31 two refueling outages in 2006. SDG&E's proportionate share of the Refueling

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1 Outage O&M costs adopted in D.06-05-016 is \$15.3 million (2008\$) per refueling
2 outage.

3 In D.06-11-026, the Commission established a two-way balancing account for
4 SDG&E's SONGS O&M costs, including refueling outage O&M costs, and SCE
5 contractual overheads billed to SDG&E under the SONGS Operating Agreement
6 after January 1, 2007. Therefore, any deviations between the forecast and actual
7 SONGS O&M costs will be captured in the balancing account.

8 DRA accepts SDG&E's SONGS expense estimate for 2008.
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10 **IV. DISCUSSION / ANALYSIS of SONGS CAPITAL EXPENDITURES**

11 Capital expenditures associated with the Steam Generator Replacement
12 Project (SGRP) are the subject of separate proceedings, and therefore are not
13 included in this GRC. Other than the SGRP, SDG&E is requesting capital
14 expenditures for SONGS of \$25.6 million in 2006, \$26.2 million in 2007, and \$26.9
15 million in 2008, purportedly based on what was authorized for this facility in SCE's
16 GRC.¹³ **DRA recognizes that SDG&E's SONGS costs for 2009 and subsequent
17 attrition years will be litigated in SCE's TY 2009 GRC.** ~~The 2007 and 2008 figures
18 are a simple escalation of 2.5% per year over the amount for the previous year.
19 These SDG&E capital forecasts are not consistent with SCE's actual SONGS GRC
20 capital forecasts for 2007 and 2008. Rather than rely on the attrition forecast from
21 SCE's TY 2006 General Rate Case, DRA proposes using actual 2006 expenditures
22 combined with more accurate 2007 and 2008 forecasts.~~

23 ~~The capital expenditure forecast originally performed by SCE, the majority
24 owner of SONGS, indicated SDG&E's forecasted share as \$25.6 million in 2006,
25 \$21 million in 2007, and \$16.7 million in 2008.¹⁴ Adjusting the \$25.6 million 2006
26 figure by \$1.45 million (to account for SDG&E's 6% A&G on Capital rate), the~~

¹³ Exh SDG&E-3, pg. MO-7.

¹⁴ ~~Exh SDG&E-3, pg. MO-6.~~

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1 forecasted 2006 capital template request amount in this GRC is \$24.172 million.
2 However, the actual capital expenditure for 2006 was \$19.172 million, or \$5 million
3 less than forecasted.¹⁵ DRA's position is that SDG&E should be made whole for its
4 expenses billed by SCE, and that the authorized revenue requirement for SONGS,
5 including capital additions, should reflect the best available forecasts, which
6 presumes replacing forecasted costs with actual costs when they become available.

7 The actual SONGS capital expenditures in 2006 were about 20% less than
8 SDG&E's forecast. SCE's forecasted SONGS capital expenditures in 2007 and
9 2008 were decreasing from their estimated 2006 level. DRA concludes that the
10 2.5% annual escalation advocated by SDG&E is too high. A more reasonable
11 approach is to use the actual 2006 expenditure and the forecasts submitted by SCE
12 for 2007 and 2008. Therefore, DRA recommends that the level of SONGS capital
13 expenditures authorized for SDG&E in this GRC should be \$20.3 million for 2006,
14 \$21.0 million for 2007, and 16.7 million for 2008.¹⁶

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¹⁵ Excel file SDGE_capex_2006_DRA.xls, tab General_esc.

¹⁶ The \$20.3 million figure for 2006 is the \$19.172 million adjusted-recorded amount plus 6% additional for A&G on capital.