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ALJ	:	<u>R. Lirag</u>
Witness	:	<u>S. Logan</u>



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

**Report on the Results of Operations  
for  
San Diego Gas & Electric Company  
Southern California Gas Company  
Test Year 2019  
General Rate Case**

**SDG&E – Electric Generation**

San Francisco, California  
April 13, 2018

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## **SDG&E – ELECTRIC GENERATION**

### **I. INTRODUCTION**

3 This exhibit presents the analyses and recommendations of the Office of  
4 Ratepayer Advocates (ORA) regarding the Electric Generation proposals of San  
5 Diego Gas & Electric Company (SDG&E) in its Test Year (TY) 2019 General Rate  
6 Case (GRC). Specifically, ORA addresses SDG&E’s forecasts of operations and  
7 maintenance (O&M) expenses for TY 2019 and capital expenditures for 2017  
8 through 2019.

9 This exhibit addresses the two primary areas of Electric Generation—  
10 generation plant, and administration—as well as certain costs associated with  
11 SDG&E’s 20% minority ownership in the San Onofre Nuclear Generating Station  
12 (SONGS).

13 The vast majority of SDG&E’s Electric Generation costs are driven by the two  
14 large combined cycle natural gas power plants it currently owns, and one large plant  
15 it expects to acquire during this general rate case cycle. The company also owns  
16 and operates two smaller combustion turbine plants, two battery energy storage  
17 systems, and a solar energy facility.

### **II. SUMMARY OF RECOMMENDATIONS**

19 The following summarizes ORA’s recommendations regarding Electric  
20 Generation O&M expenses:

- 21 • ORA accepts SDG&E’s TY 2019 forecast for Electric Generation  
22 O&M expenses except as described below.
- 23 ✓ ORA recommends the SDG&E’s forecast of the Electric  
24 Generation O&M expenses for the Otay Mesa Energy Center  
25 (OMEC) be removed from this General Rate Case.
- 26 • ORA recommends that SDG&E file a Tier 1 Advice Letter if and  
27 when SDG&E determines that it shall acquire the Otay Mesa  
28 Energy Center (OMEC) under the terms of a previously-approved  
29 contractual arrangement. The Tier 1 Advice filing should be

1 consistent with the OMEC balancing account proposal in Exhibit  
2 (Ex.) SDG&E-41, except as described below.

3 ✓ ORA recommends that the Tier 1 Advice Letter filing reflect a  
4 \$1.1 million reduction to SDG&E's \$22.8 million OMEC annual  
5 O&M expense forecast for TY 2019.

6 ✓ ORA further recommends that the Tier 1 Advice Letter include a  
7 pro-rata forecast for TY 2019 (or first partial year of operation),  
8 after the \$1.1 million reduction is applied to SDG&E's \$22.8  
9 million annual OMEC O&M expense forecast.

10 The following summarizes ORA's recommendations regarding Electric  
11 Generation capital expenditures:

- 12 • ORA accepts SDG&E's TY 2019 forecast for Electric Generation  
13 Capital expenditures except as described below.
  - 14 ✓ ORA recommends SDG&E's forecast of the Electric Generation  
15 Capital expenditure of the \$282 million acquisition cost of  
16 OMEC be removed from this General Rate Case.
  - 17 ✓ ORA recommends SDG&E's forecast of the Electric Generation  
18 Capital expenditures of \$5.4 million of ongoing costs for OMEC  
19 be removed from this General Rate Case.
- 20 • ORA recommends that SDG&E file a Tier 1 Advice Letter if and  
21 when SDG&E determines that it shall acquire OMEC under the  
22 terms of the previously-approved contractual arrangement. The Tier  
23 1 Advice filing shall reflect the OMEC balancing account proposal  
24 as described in Ex. SDG&E-41 except as described below.
- 25 • ORA further recommends that the Tier 1 Advice Letter include a  
26 pro-rata forecast of capital expenditures for TY 2019 (or first partial  
27 year of operation).

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1 Table 8-1 compares ORA's and SDG&E's TY 2019 Electric Generation  
 2 expense forecasts:

3 **Table 8-1**  
 4 **Electric Generation O&M Expenses for 2019**  
 5 **(in Thousands of 2016 Dollars)**

Description (a)	ORA Recommended (b)	SDG&E Proposed <sup>1</sup> (c)	Amount SDG&E>ORA (d=c-b)
<b>Non-Shared</b>			
Generation Plant	\$37,575	\$60,371	\$22,796
Administration	\$469	\$469	\$0
SONGS	\$1,476	\$1,476	\$0
Total Non-Shared	\$39,520	\$62,316	\$22,796
<b>Shared</b>			
Resource Planning	\$1,095	\$1,095	\$0
Total Shared	\$1,095	\$1,095	\$0
<b>Total</b>	<b>\$40,615</b>	<b>\$63,411</b>	<b>\$22,796</b>

6 Table 8-2 compares ORA's and SDG&E's 2017-2019 Electric Generation  
 7 capital expenditure forecasts:

8 **Table 8-2**  
 9 **Electric Generation Capital Expenditures for 2017-2019**  
 10 **(in Thousands of Dollars)**

Description	ORA Recommended			SDG&E Proposed <sup>2</sup>		
	2017	2018	2019	2017	2018	2019
Tools & Test Equip.	\$119	\$275	\$275	\$275	\$275	\$275
Miramar	\$738	\$2,580	\$2,580	\$2,580	\$2,580	\$2,580
Palomar	\$4,438	\$5,351	\$5,351	\$5,351	\$5,351	\$5,351
Desert Star	\$3,394	\$3,361	\$3,361	\$3,361	\$3,361	\$3,361
Cuyamaca Peak	\$3,791	\$453	\$453	\$453	\$453	\$453
South Grid	\$0	\$806	\$0	\$300	\$806	\$0
Otay Mesa Acquisition	\$0	\$0	\$0	\$0	\$280,000	\$0
Otay Mesa Ongoing	\$0	\$0	\$0	\$0	\$0	\$5,351
Solar Photovoltaic	\$327	\$0	\$0	\$994	\$0	\$0
Total	\$12,807	\$12,826	\$12,020	\$13,314	\$292,826	\$17,371

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<sup>1</sup> Ex. SDG&E-16, p. DSB-17, Table DSB-5 (non-shared); Ex. SDG&E-16, p. DSB-26, Table DSB-9 (shared).

<sup>2</sup> Ex. SDG&E-16, p. DSB-28, Table DSB-10.

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## PART I: NON-SHARED EXPENSES

### I. GENERATION PLANT

3 Table 8-3 below presents SDG&E’s historical Generation Plant O&M  
4 expenses, ORA’s TY recommendation and SDG&E’s TY request.

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**Table 8-3**  
**Generation Plant O&M Expenses**  
**2012-2016 Recorded and 2019 Forecasts**  
**(in Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SDG&E 2019	ORA 2019
*Palomar	\$21,659	\$18,245	\$24,818	\$16,283	\$17,583	\$18,556	\$18,556
Desert Star	\$19,626	\$18,090	\$23,566	\$20,899	\$14,419	\$15,561	\$15,561
Miramar	\$2,518	\$3,434	\$1,837	\$2,697	\$1,414	\$2,380	\$2,380
Cuyamaca Peak	\$1,095	\$1,079	\$1,254	\$494	\$1,369	\$1,078	\$1,078
Otay Mesa	\$0	\$0	\$0	\$0	\$0	\$22,796	\$0
Total	\$44,898	\$40,848	\$51,475	\$40,373	\$34,785	\$60,371	\$37,575

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Source: 2012-2016 data from Ex. SDG&E-16-WP (O&M), pp.9, 16, 22, 27, 33. SDG&E 2019 forecast from Ex. SDG&E-16, p. DSB-18, Table DSB-6. \*Palomar Energy Center (PEC) figures include the expenses for the Escondido Battery Energy Storage System, the El Cajon Battery Energy Storage System and the Ramona Solar Energy Project.

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#### A. Overview of SDG&E’s Request

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SDG&E requests \$60.4 million for Generation Plant O&M expenses for TY 2019. The request covers the O&M expense related to the following SDG&E-owned power plants: Palomar Energy Center (PEC), Desert Star Energy Center (DESC), Miramar Energy Facility (MEF), and Cuyamaca Peak Energy Plant (CPEP).<sup>3</sup> Three smaller facilities are also included in the request: Escondido Battery Energy Storage System (Escondido BESS), El Cajon Battery Energy Storage System (El Cajon BESS) and Ramona Solar Energy Project (RSEP).

SDG&E’s also included its forecast of expenses related to the Otay Mesa Energy Center (OMEC). SDG&E currently receives capacity and energy from the

<sup>3</sup> Ex. SDG&E-16, p. DSB-2.

1 603 megawatt (MW) combined cycle plant under the terms and conditions of a  
2 contract approved by the CPUC in Decision (D.) 06-09-021. The 10-year contract is  
3 scheduled to expire in October 2019. Under the terms of the contract, the plant's  
4 owner, Calpine Corporation, may "put" the facility to SDG&E for a set price. Calpine  
5 must notify SDG&E that it will exercise the put option by April 1, 2019. If Calpine  
6 exercises the option, SDG&E will take ownership of the OMEC when the purchase  
7 power agreement expires.

## 8 **B. ORA's Analysis**

9 This section discusses the expenses associated with the SDG&E-owned  
10 combined cycle and peaking power plants. It also addresses ORA's recommended  
11 treatment of the Otay Mesa expenses in case SDG&E is obligated to take ownership  
12 of OMEC under the terms discussed above.

### 13 **1. Generation Plant Expenses - Palomar, Desert Star, 14 Miramar and Cuyamaca**

15 SDG&E currently owns and operates two large natural gas-fired combined  
16 cycle power plants. The Palomar Energy Center (PEC) is a 565 MW capacity plant  
17 and is located in Escondido, California. The Desert Star Energy Center (DSEC) is a  
18 480 MW plant and is located in Boulder City, Nevada.

19 SDG&E also owns and operates two smaller natural gas-fired peaking power  
20 plants. The Miramar Energy Facility (MEF) is 92 MW and is located in San Diego,  
21 California. The Cuyamaca Peaking Energy Plant (CPEP) is 45 MW and is located in  
22 El Cajon, California.

23 There are three other power plants which are incorporated into SDG&E's  
24 O&M request. The Escondido Battery Energy Storage System (Escondido BESS)  
25 has a maximum capacity of 30 MW over four hours, and the El Cajon Battery Energy  
26 Storage System (El Cajon BESS) has a maximum capacity of 7.5 MW over four  
27 hours. Finally, the Ramona Solar Energy Project (RSEP) is located in Ramona,  
28 California, and has a maximum capacity of 4.2 MW. For reporting purposes, all of  
29 the O&M costs for the Escondido BESS, El Cajon BESS, and RSEP are recorded  
30 and forecast with the Palomar Energy Center costs. Most of the expense forecasts



1 for all of the power plants are based on 5-year historical averages. One component  
2 of the Desert Star forecast is a base year (2016) forecast, and is discussed below.

3 **a. Generation Plant Forecasts Based on 5-Year**  
4 **Averages**

5 For each of the power plants discussed above, most of the elements of  
6 SDG&E's forecast are based on the recorded 5-year averages (labor and non-labor).  
7 Labor costs include supervision, maintenance, operations and engineering  
8 personnel. Non-labor costs include industrial gases, chemicals, water, parts, and  
9 maintenance activities.<sup>4</sup> ORA verified that SDG&E's forecasts are based on 5-year  
10 (2012-2016) averages of the recorded expenses. Table 8-3 above confirms the use  
11 of 5-year averages, and ORA recommends that SDG&E's TY 2019 forecast be  
12 adopted.

13 **b. Generation Plant Forecasts Based on Base-**  
14 **Year Forecasts**

15 One component of SDG&E's O&M expense forecast is based on base-year  
16 (2016) recorded costs. As seen in Table 8-3 above, the Desert Star expense for  
17 2016 is about \$5 million greater than the average annual expense for the previous  
18 four years, 2012-2015. SDG&E explains that the Long-Term Service Agreement  
19 (LTSA) for Desert Star is based on actual run hours, and 2016 is more reflective of  
20 2019 expectations. This cost element of the Desert Star forecast is treated as Non-  
21 Standard Escalation (NSE). The base-year method to forecast for Desert Star is a  
22 benefit to ratepayers as it reflects lower costs, and ORA recommends that it be  
23 adopted.<sup>5</sup>

24 **2. Otay Mesa**

25 As discussed above, the Otay Mesa Energy Center currently delivers capacity  
26 and energy to San Diego's grid under a 10-year purchase agreement set to expire in

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<sup>4</sup> Ex. SDG&E-16-WP (O&M), p. 33.

<sup>5</sup> Ex. SDG&E-16-WP (O&M), p. 16.

1 October of 2019.<sup>6</sup> Though not mandated, ORA concurs with SDG&E that is  
2 reasonable to expect Calpine to exercise its put option, and SDG&E will own the  
3 OMEC sometime in the 2019 timeframe. However, since there is no expectation  
4 that SDG&E will own and control the plant by January 1, 2019, ratepayers should be  
5 protected against over collection of the revenue requirements associated with the  
6 OMEC. The following sections discuss the OMEC O&M expense forecast, and the  
7 proposed ratemaking treatment to ensure against potential double recovery of those  
8 expenses.

9 **a. Otay Mesa O&M Forecast**

10 SDG&E forecasts the annual OMEC O&M forecast at \$22.8 million. Since the  
11 Company does not have access to the detailed costs, SDG&E based the OMEC  
12 O&M forecast on the 5-year average of the Palomar Energy Center costs due to the  
13 similarities between the two facilities.<sup>7</sup> ORA generally agrees with the basis of this  
14 forecast, with one exception.

15 In developing the Palomar Energy Center forecast, SDG&E makes several  
16 adjustments to the historical recorded data to “adjust-out” non-recurring costs which  
17 are predictable. This is normal practice. SDG&E’s workpapers reflect several of  
18 these adjustments – such as, storm drain system or cooling tower expenses -- and  
19 most appear applicable to Palomar, not Otay Mesa.

20 ORA recommends that one adjustment be applied to Otay Mesa. That  
21 adjustment is for “Contracting/Procurement Efficiencies”, and totals \$1.1 million.<sup>8</sup>  
22 SDG&E makes a similar adjustment to Desert Star.<sup>9</sup> Since the two large combined  
23 cycle plants SDG&E *currently* owns reflect a Contract/Procurement Efficiency  
24 adjustment, the plant that SDG&E *expects* to own in 2019 should reflect a similar  
25 adjustment. ORA asked SDG&E why it did not make the adjustment and it stated

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<sup>6</sup> The costs associated with this contract are recovered through the annual Energy Resource Recovery Account (ERRA) proceeding.

<sup>7</sup> Ex. SDG&E-16, p. DSB-21.

<sup>8</sup> Ex. SDG&E-16-WP (O&M), p. 7.

<sup>9</sup> Ex. SDG&E-16-WP, p. 14.

1 “The OMEC Generation Plant is not owned by SDG&E.”<sup>10</sup> This is not logical and  
2 does not comport with the overall basis of the OMEC forecast – to be consistent with  
3 the Palomar forecast. ORA recommends that the annual O&M forecast for Otay  
4 Mesa be reduced by \$1.1 million to \$21.7 million.

5 **b. Treatment of Otay Mesa O&M Expenses**

6 SDG&E proposes the Otay Mesa Acquisition Balancing Account (OMABA) in  
7 Ex. SDG&E-41.<sup>11</sup> It is not clear from the language in that Exhibit that the proposal is  
8 intended to cover Otay Mesa O&M expenses. ORA now understands that SDG&E  
9 intends for the O&M expenses to be treated as balancing account expenses. In  
10 response to an ORA data request, SDG&E states:

11 Balancing account treatment for revenues collected for O&M  
12 expenses of OMEC Generation Plant for the time period  
13 beginning January 1, 2019 until SDG&E takes ownership, was  
14 not specifically addressed in Electric Generation Testimony (Ex.  
15 SDG&E-16), but SDG&E will take steps during the GRC  
16 implementation process when creating the OMABA to include  
17 the authorized revenues collected from customers to cover both  
18 the capital-related and O&M costs from January 1, 2019 until  
19 SDG&E takes ownership of the OMEC Generation Plan.<sup>12</sup>

20 ORA agrees that the OMABA should cover Otay Mesa O&M expenses but  
21 does not agree that authorized revenues should be collected beginning January 1,  
22 2019. The following sections address ORA’s proposal to implement the OMABA  
23 and the ultimate recovery of OMEC revenues during this general rate case cycle.  
24 The O&M, Acquisition, and On-Going Capital costs would all be covered under  
25 ORA’s proposal. The Acquisition Capital and On-Going capital expenditures are  
26 more specifically addressed later in this exhibit.

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<sup>10</sup> SDGE response to ORA data request ORA-SDG&E-120-SJL, Q.4.b.

<sup>11</sup> Ex. SDG&E-41, p. NGJ-13.

<sup>12</sup> SDG&E response to ORA data request ORA-SDG&E-120-SJL, Q.5.

1                                    **i.    Otay Mesa Revenue Requirements Should Not**  
2                                    **Be In Test Year 2019**

3                    As discussed above, SDG&E will not own the OMEC until October 2019 at  
4 the earliest. During the months leading to the transfer date, SDG&E will collect  
5 OMEC contract costs through the Energy Resource Recovery Account (ERRA).  
6 There is no reason to implement the OMABA beginning January 1, 2019, as there is  
7 no reasonable expectation that the plant will be owned by SDG&E until at least the  
8 10<sup>th</sup> month of the Test Year.

9                                    **ii.    SDG&E Should File a Tier 1 Advice Letter to**  
10                                    **Implement OMABA**

11                    After Calpine notifies SDG&E that it will exercise its put option, SDG&E  
12 should file a Tier 1 Advice Letter to implement the OMABA. The Advice filing should  
13 be made when SDG&E has a reasonable forecast of its ownership/operational date.  
14 The filing should include the forecast of the O&M expense and On-Going capital  
15 expenditure on a pro-rata basis. For example, if SDG&E is notified by April 1, 2019  
16 that Calpine will exercise its option, and SDG&E expects to be operating OMEC by  
17 October 1, 2019, the Advice Letter should reflect the revenue requirements of the  
18 three month O&M expense and three month On-Going capital expenditure of the  
19 annual forecast discussed above, incorporating ORA's \$1.1 million O&M adjustment.  
20 SDG&E should make the Advice filing sometime after April 1 and before October 1,  
21 2019.

22                    The Acquisition Capital requires no pro rata adjustment. The Advice Letter  
23 should reflect the revenue requirement associated with the transfer price and  
24 SDG&E's ownership/operational date. The option price is discussed later in this  
25 exhibit.

26                                    **iii.    The OMABA Should Be One-Way**

27                    SDG&E should recover the revenue requirement associated with the OMEC  
28 forecast as discussed in this exhibit, but no more. Further, any unspent revenues  
29 should be returned (or credited) to ratepayers, as discussed in the next section. The  
30 balancing account should be one-way.

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1 **iv. The OMABA Should Track the OMEC Revenue**  
 2 **Requirement for this GRC Cycle**

3 The OMABA is necessary to ensure that ratepayers: (1) do not pay OMEC  
 4 costs in GRC rates and ERRA rates at the same time, and (2) do not overpay for  
 5 OMEC in GRC rates because of the uncertainty of the date SDG&E takes  
 6 ownership. For administrative purposes, the OMABA should remain open to track  
 7 the OMEC revenue requirement through this GRC cycle. Any over-collections in the  
 8 OMABA should be refunded or credited back to ratepayers at the end of the cycle.  
 9 For the next GRC, the OMEC should be incorporated into the Generation Plant  
 10 forecast.

11 **II. ADMINISTRATION**

12 This section addresses General Plan Administration and Electric Project  
 13 Development. Table 8-4 below presents SDG&E’s historical Administration O&M  
 14 expenses, ORA’s recommendation and SDG&E’s TY 2019 request.

15 **Table 8-4**  
 16 **Administration O&M Expenses**  
 17 **2012-2016 Recorded and 2019 Forecasts**  
 18 **(in Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SDG&E 2019	ORA 2019
Gen Plant Admin	\$340	\$186	\$115	\$195	\$348	\$348	\$348
Electric Project Development	\$16	\$9	\$3	\$71	\$63	\$121	\$121
Total	\$ 356	\$ 195	\$ 118	\$ 266	\$ 411	\$469	\$469

19 Source: 2012-2016 data from Ex. SDG&E-16-WP, p. 39, p. 44. SDG&E 2019 forecast from Ex.  
 20 SDG&E-16, p. DSB-22, Table DSB-7.

21 **A. Overview of SDG&E’s Request**

22 General Plant Administration includes the costs for: (1) the Director of  
 23 Generation, (2) a Principal Business Analyst, and (3) associated administrative

1 expenses. These positions provide managerial oversight, plant cost analysis, and  
2 budgeting for all of SDG&E's generating facilities.<sup>13</sup>

3 Electric Project Development includes the costs for the Manager – Electric  
4 Project Development, and associated administrative expenses. This position  
5 provides project management and business planning for existing and planned  
6 electric power plant projects.<sup>14</sup>

7 For both Administration activities described in the section, SDG&E used the  
8 base year (2016) method for forecasting these expenses.

### 9 **B. ORA's Analysis**

10 The Administration activities include the TY 2019 forecast costs for 2.8 full-  
11 time equivalent (FTE) positions. The base year (2016) reflects slightly fewer FTE, at  
12 2.5. The five-year recorded costs show a range of 1.1 FTE to 2.5 FTE. Because  
13 there are increased activities in Electric Project Development, and a corresponding  
14 increase General Administration, the base year method is a reasonable basis for  
15 forecasting these activities. ORA accepts SDG&E's forecast for Administration O&M  
16 expenses of \$0.469 million.

### 17 **III. SONGS**

18 The San Onofre Nuclear Generating Station (SONGS) was retired by  
19 Southern California Edison Company (SCE) in 2013. SDG&E is obligated to pay  
20 SCE its 20 percent share of certain costs which need to be recovered in the GRC.  
21 The great majority of ongoing SONGS are recovered through the nuclear  
22 decommissioning proceedings. Two types of costs are included in SDG&E's O&M  
23 request – Marine Mitigation and Worker's Compensation.<sup>15</sup> Table 8-5 presents

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<sup>13</sup> Ex. SDG&E-16-WP (O&M), p. 39.

<sup>14</sup> Ex. SDG&E-16-WP (O&M), p. 44.

<sup>15</sup> Ex. SDG&E-16, pp. DSB-23, -25.

1 SDG&E’s historical SONGS-related O&M expenses, ORA’s recommendation and  
2 SDG&E’s request.

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**Table 8-5**  
**SONGS-Related O&M Expenses**  
**2012-2016 Recorded and 2019 Forecasts**  
**(in Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SDG&E 2019	ORA 2019
Marine Mitigation	\$923	\$1,182	\$1,025	\$926	\$842	\$1,015	\$1,015
Worker’s Comp	\$414	\$591	\$461	\$416	\$397	\$461	\$461
Total	\$1,337	\$1,773	\$1,486	\$1,342	\$1,239	\$1,476	\$1,476

7 Source: 2012-2016 total data from Ex. SDG&E-16-WP (O&M), p. 50. (Marine Mitigation/Worker’s  
8 Comp. ratios based on 2019 ratio.) SDG&E 2019 forecast from Ex. SDG&E-16, p. DSB-23, Table  
9 DSB-8.

## 10 **A. Overview of SDG&E’s Request**

11 SDG&E’s share of TY 2019 SONGS Marine Mitigation expense is forecast to  
12 be \$1.0 million. These expenses are for remaining work on the Wheeler North Reef  
13 Expansion Project, and include SCE’s overheads.<sup>16</sup>

14 SDG&E’s share of TY 2019 Worker’s Compensation expense is forecast to  
15 be \$0.46 million. The SCE self-insured program was terminated in 1999, but open  
16 claims remain the responsibility of SONGS co-owners.<sup>17</sup>

## 17 **B. ORA’s Analysis**

18 This section addresses ORA’s analysis of SONGS Marine Mitigation and  
19 Worker’s Compensation O&M expenses.

### 20 **1. Marine Mitigation**

21 SDG&E’s forecast of the Marine Mitigation expense is based on the forecast  
22 submitted by SCE in its TY 2018 GRC. The five-year adjusted-recorded data is also  
23 reflective of the forecast.<sup>18</sup> ORA verified the data from SCE’s TY 2018 GRC. ORA

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<sup>16</sup> Ex. SDG&E-16, p. DSB-23, -24.

<sup>17</sup> Ex. SDG&E-16, p. DSB-24.

<sup>18</sup> Ex. SDG&E-16-WP (O&M), pp. 50-51.

1 accepts SDG&E’s forecast for Marine Mitigation O&M expenses and it should be  
2 adopted.

3 **2. SONGS Worker’s Compensation**

4 Similar to SDG&E’s forecast of the Marine Mitigation expense, the Worker’s  
5 Compensation expense forecast is based on the forecast submitted by SCE in its TY  
6 2018 GRC. The five-year adjusted-recorded data is also reflective of the forecast.<sup>19</sup>  
7 ORA verified the data from SCE’s TY 2018 GRC. ORA accepts SDG&E’s forecast  
8 for Worker’s Compensation O&M expenses and it should be adopted.

9 **3. SONGS Balancing Account (SONGSBA)**

10 The Commission authorized SDG&E to establish the SONGS Balancing  
11 Account in D.06-11-026. The purpose is to allow SDG&E to recover no more and no  
12 less than actual SONGS non-decommissioning expenses. SDG&E requests the  
13 continuation of the SONGSBA.<sup>20</sup> ORA accepts SDG&E’s request and recommends  
14 that the SONGSBA continue.

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<sup>19</sup> Ex. SDG&E-16-WP (O&M), pp. 50-51.

<sup>20</sup> Ex. SDG&E-16, p. DSB-25.



1 **PART II: SHARED EXPENSES**

2 **I. RESOURCE PLANNING**

3 The Resource Planning O&M expenses are primarily comprised of the electric  
4 resource planning staff costs and the software license costs for the planning models  
5 used for integrated resource planning (IRP), evaluating requests for offers, ERRA  
6 filings etc.<sup>21</sup> Table 8-6 presents SDG&E’s historical Resource Planning expenses,  
7 ORA’s recommendation and SDG&E’s request.

8 **Table 8-6**  
9 **Resource Planning Expenses**  
10 **2012-2016 Recorded and 2019 Forecasts**  
11 **(in Thousands of 2016 Dollars)**

Description	2012	2013	2014	2015	2016	SDG&E 2019	ORA 2019
Resource Planning	\$740	\$738	\$796	\$747	\$747	\$1,095	\$1,095

12 Source: 2012-2016 data from Ex. SDG&E-16-WP (O&M), p. 60. SDG&E 2019 forecast from Ex.  
13 SDG&E-16, p. DSB-26, Table DSB-9.

14 **A. Overview of SDG&E’s Request**

15 SDG&E uses a five-year average of recorded costs for both labor and non-  
16 labor expenses.<sup>22</sup> The recorded data reflects about 4.1 FTE, while the forecast  
17 shows 5.0. There is also some increase in the software license costs reflected in the  
18 forecast.<sup>23</sup>

19 **B. ORA’s Analysis**

20 The increase in FTE from 4.1 to 5.0 is based on a new Manager position,  
21 which is budgeted for \$282 thousand. The incremental cost for software licensing,  
22 \$59 thousand, is based on increased activities related to Senate Bill (SB) 350  
23 requirements. ORA does not oppose SDG&E’s forecast, as it comports with

<sup>21</sup> Ex. SDG&E-16, p. DSB-26.

<sup>22</sup> Ex. SDG&E-16, p. DSB-27.

<sup>23</sup> Ex. SDG&E-16-WP (O&M), pp. 60-662.

- 1 expected increases in statewide resource planning activities. SDG&E's Resource
- 2 Planning O&M forecast of \$1.095 million in 2019 should be adopted.
- 3

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### PART III: CAPITAL EXPENDITURES

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This section addresses SDG&E’s forecasts of Electric Generation capital expenditures for 2017, 2018, and 2019. The five-year recorded expenditures are provided below. SDG&E based its forecasts on either five-year averages, or zero-based budgeting, depending on the available data.

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#### I. SUMMARY OF ELECTRIC GENERATION CAPITAL EXPENDITURES: 2012 – 2016

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Table 8-7 shows the recorded Electric Generation capital expenditures for 2012 through 2016.

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**Table 8-7  
Electric Generation  
Recorded 2012-2016 Capital Expenditures  
(in Thousands of Dollars)**

Description	2012	2013	2014	2015	2016
Capital Tools & Test Equipment	\$747	\$332	-\$3	\$148	\$152
Miramar Energy Facility	\$508	\$991	\$11,210	\$25	\$83
Palomar Energy Center	\$11,876	\$2,518	\$4,634	\$2,969	\$4,758
Desert Star Energy Center	\$2,378	\$5,209	\$4,620	\$1,246	\$3,352
Cuyamaca Peak Energy Plant	\$238	\$247	\$2	\$591	\$1,186
South Grid – Black Start CPEP	\$0	\$0	\$0	\$0	\$0
Otay Mesa Energy Center – Acquisition	\$0	\$0	\$0	\$0	\$0
Otay Mesa Energy Center – Ongoing Capital	\$0	\$0	\$0	\$0	\$0
Solar Photovoltaic Plant	\$781	\$757	\$665	\$429	\$13,457
Total	\$16,528	\$10,054	\$21,128	\$5,408	\$22,988

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Source: 2012-2016 data from Ex. SDG&E-16-WP (Capital), pp. 5, 13, 21, 29, 37, 45, 49, 51, 56, 61.

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Most of the capital expenditure spending of the five-year period is relatively stable. Where there are exceptions, there are explanations. For example, the Miramar Energy Facility had a significant expenditure in 2014 due to a turbine

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1 replacement project.<sup>24</sup> The Solar Photovoltaic Plant category includes the Ramona  
 2 Solar Energy Project that incurred most of its capital spending in 2016.<sup>25</sup>

3 **II. ELECTRIC GENERATION CAPITAL EXPENDITURES: 2017 –**  
 4 **2019**

5 Table 8-8 shows ORA's recommended and SDG&E's proposed 2017-2019  
 6 electric generation capital expenditures.

7 **Table 8-8**  
 8 **2017-2019 Capital Expenditure Forecast**  
 9 **(in Thousands of 2016 Dollars)**

Description	ORA Recommended <sup>26</sup>			SDG&E Proposed <sup>27</sup>		
	2017	2018	2019	2017	2018	2019
Capital Tools & Test Equipment	\$119	\$275	\$275	\$275	\$275	\$275
Miramar Energy Facility	\$738	\$2,580	\$2,580	\$2,580	\$2,580	\$2,580
Palomar Energy Center	\$4,438	\$5,351	\$5,351	\$5,351	\$5,351	\$5,351
Desert Star Energy Center	\$3,394	\$3,361	\$3,361	\$3,361	\$3,361	\$3,361
Cuyamaca Peak Energy Plant	\$3,791	\$453	\$453	\$453	\$453	\$453
South Grid – Black Start CPEP	\$0	\$806	\$0	\$300	\$806	\$0
Otay Mesa Energy Center - Acquisition	\$0	\$0	\$0	\$0	\$280,000	\$0
Otay Mesa Energy Center – Ongoing Capital	\$0	\$0	\$0	\$0	\$0	\$5,351
Solar Photovoltaic Plant	\$327	\$0	\$0	\$994	\$0	\$0
Total	\$12,807	\$12,826	\$12,020	\$13,314	\$292,826	\$17,371

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 24 Ex. SDG&E-16, p. DSB-29.

25 Ex. SDG&E-16-WP (Capital), p. 61.

26 ORA's recommended 2017 forecast is based on the recorded data provided to ORA on March 12, 2018.

27 Ex. SDG&E-16, p. DSB-28, Table DSB-10.

1           **A. Overview of SDG&E’s Request**

2           SDG&E’s capital expenditure forecasts are based on either the five-year  
3 average method or the zero-based budgeting method.<sup>28</sup> Most of SDG&E’s  
4 forecasts are consistent with historical spending. The notable exception is the  
5 inclusion of the Otay Mesa Acquisition cost and the Otay Mesa On-Going capital  
6 cost. ORA’s analysis of these forecasts is discussed below.

7           **B. ORA’s Analysis**

8           ORA agrees with most of the elements of SDG&E’s Electric Generation  
9 Capital forecast. The exception is the inclusion of Otay Mesa. ORA discusses the  
10 capital expenditure forecasts based on five-year averages, and then the forecasts  
11 based on zero-based budgeting. The final sections address ORA’s proposed  
12 treatment of Otay Mesa capital expenditures.

13                           **1. Capital Forecasts Based on Five-Year Averages**

14           The following categories of capital expenditures are forecast by SDG&E using  
15 the five-year average method: Capital Tools & Test Equipment; Miramar Energy  
16 Facility; Palomar Energy Center; Desert Star Energy Center; and Cuyamaca Peak  
17 Energy Center. SDG&E used the five-year method for forecasting both labor and  
18 non-labor expenditures. Additionally, each of these categories is forecast with the  
19 same values for 2017, 2018, and 2019, as shown in Table 8-8. This forecast  
20 method smooths out the impact of hard to predict capital investments, such as the  
21 Miramar turbine replacement in 2014. ORA verified that SDG&E’s forecast numbers  
22 represent five-year averages.

23           ORA recommends one set of adjustments to SDG&E’s forecast. ORA  
24 received the recorded 2017 capital data from SDG&E on March 12, 2018.<sup>29</sup> The  
25 total 2017 recorded capital is within five percent of SDG&E’s forecast. This is a  
26 good indicator of the quality of the forecast. ORA recommends that the recorded

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<sup>28</sup> SDG&E-16-WP (Capital), pp. 6, 14, 22, 30, 38, 46, 50, 52, 57, 62.

<sup>29</sup> See Ex. ORA-01, Attachment 1.

1 2017 capital values be adopted. ORA does not take issue with SDG&E’s 2018 and  
2 2019 forecasts based on the 5-year averages.

3 **2. Capital Forecasts Based on Zero-Based**  
4 **Budgeting**

5 The following categories of capital expenditures are forecast by SDG&E using  
6 the zero-based budgeting method: South Grid – Black Start Cuyacama Peak  
7 Energy Plant (CPEP); Otay Mesa Energy Center – Acquisition; Otay Mesa Energy  
8 Center – On-Going Capital; and Solar Photovoltaic Plant.<sup>30</sup> The South Grid – Black  
9 Start and Solar Photovoltaic are discussed here. The treatment of Otay Mesa  
10 capital is discussed in the following sections.

11 Regarding the South Grid – Black Start CPEP, SDG&E states it “Will install a  
12 small size engine generator at El Cajon substation to provide Blackstart capability  
13 the Cuyamaca Gen-1 and Gen02 units.”<sup>31</sup> The project was expected to have  
14 expenditures in 2017 and 2018, but the recorded 2017 data above shows \$0  
15 spending. While zero-based budgeting appears appropriate for this project, some  
16 spending may still occur in 2019. ORA accepts SDG&E forecasts for 2018 and 2019  
17 for the South Grid – Black Start project. ORA recommends that the 2017 recorded  
18 data used in ORA’s forecast be adopted.

19 The Solar Photovoltaic Plant (Ramona Solar Energy Project) is part of a  
20 Commission-authorized program to enhance SDG&E’s expertise while contributing  
21 to the renewable energy goals.<sup>32</sup> Most of the capital expenditures were completed  
22 by 2016 for this project. Some residual spending was forecast for 2017. ORA  
23 recommends that its 2017 forecast be adopted, and accepts SDG&E’s forecast for  
24 2018 and 2019.

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<sup>30</sup> Ex. SDG&E-16-WP (Capital), pp. 46, 52, 57, 62.

<sup>31</sup> Ex. SDG&E-16-WP (Capital), p. 49.

<sup>32</sup> Ex. SDG&E-16-WP (Capital), p. 61.

1                                   **3. Treatment Otay Mesa Acquisition Capital**

2                   The current owner of the Otay Mesa Energy Center has an option to sell the  
3 plant to SDG&E for a set price. That price is \$282 million, and is included in  
4 SDG&E’s forecast as a 2018 capital expenditure.<sup>33</sup> ORA verified that this price is  
5 consistent with the terms and conditions of the agreement approved by D.06-09-021.

6                   As previously discussed in this exhibit, all costs associated with the Otay  
7 Mesa transfer be removed from this GRC forecast. ORA’s recommended treatment  
8 of the Otay Mesa Acquisition capital expenditure is discussed in Part I., Section  
9 I.B.2.i.-iv., above. ORA recommends that the treatment described be adopted.

10                                   **4. Treatment of Otay Mesa On-Going Capital**

11                   SDG&E forecasts On-Going annual capital expenditures of \$5.4 million for  
12 2019 (\$0 for both 2017 and 2018). SDG&E describes the forecast as zero-based  
13 because it lacks recorded data.<sup>34</sup> SDG&E used the same forecast for Otay Mesa as  
14 it used for Palomar Energy Center. ORA accepts the basis of the forecast as  
15 reasonable, however the annual forecast should not be the adopted because  
16 SDG&E will likely not take ownership of the plant until October, 2019.

17                   ORA’s recommended balancing account treatment and Tier 1 Advice Letter  
18 process described in Part I., Section I.B.2.i.-iv., above, should be adopted for the  
19 Otay Mesa On-Going capital expenditures. A pro-rata forecast should be reflected  
20 in the advice filing based on SDG&E’s expected operation date of the OMEC.

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<sup>33</sup> Ex. SDG&E-16-WP (Capital), p. 54.

<sup>34</sup> Ex. SDG&E-16-WP (Capital), p. 57.

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## WITNESS QUALIFICATIONS

2           My name is Scott J. Logan. My business address is 505 Van Ness Avenue,  
3 San Francisco, California. I am employed by the Office of Ratepayer Advocates  
4 (ORA) as a Public Utilities Regulatory Analyst V in the Energy Cost of Service and  
5 Natural Gas Branch.

6           I received a Bachelor of Arts degree in Economics from San Francisco State  
7 University in 1985.

8           Since joining the Commission in 1986, I have worked on electricity and  
9 energy matters for ORA, including energy efficiency, resource planning, long-term  
10 procurement and planning (LTPP), transmission planning and Certificate of Public  
11 Convenience and Necessity (CPCN) proceedings for major transmission projects. I  
12 have testified in numerous Commission proceedings. Most recently, I have testified  
13 in the San Onofre Nuclear Generating Station (SONGS) Investigation, the Southern  
14 California Edison Company (SCE) 2015 General Rate Case (GRC), and the Pacific  
15 Gas and Electric Company 2014 GRC. I also produced written testimony in the San  
16 Diego Gas & Electric (SDG&E) 2016 GRC, PG&E's 2017 GRC, and SCE's 2018  
17 GRC.

18           This completes my prepared testimony.