

Docket : A.10-12-005 / 006  
Exhibit Number : DRA-11  
Commissioner : Ferron  
ALJ : Wong  
Witness : Laura Krannawitter



**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 2012**

**SDG&E Electric Distribution**  
**Capital Expenditures**

San Francisco, California  
September 1, 2011

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## ELECTRIC DISTRIBUTION CAPITAL

### 2 I. INTRODUCTION

3 This exhibit presents the analyses and recommendations of the Division of  
4 Ratepayer Advocates (DRA) regarding San Diego Gas & Electric Company's  
5 (SDG&E) forecasts of electric distribution capital expenditures for Test Year (TY)  
6 2012.

7 At year end 2009, a large portion, 60%,<sup>1</sup> of SDG&E's electric distribution  
8 system was underground and was comprised of 6,683 and 10,062 circuit miles of  
9 overhead and underground cables, respectively. There are 277 distribution  
10 substations which feed 995 primary distribution circuits. The distribution system also  
11 includes a significant amount of SCADA<sup>2</sup> to facilitate planning and operations.  
12 Additionally, the distribution system includes 162,066 distribution transformers,  
13 226,404 poles<sup>3</sup> and 44,312 manholes, handholes, subsurface enclosures and  
14 vaults.<sup>4</sup> This infrastructure includes 1.4 million meters to serve approximately 3  
15 million customers. Each circuit, on average, serves 1,350 customers. This  
16 compares to 55% undergrounding, 906 distribution circuits, 268 substations,  
17 230,000 poles, 1.1 million meters with each circuit serving 1,350 customers, on  
18 average, in 2002.<sup>5</sup> The distribution system has clearly grown and evolved over the  
19 last two rate cases. The key to the forecast for 2010-2012, though, is whether or not  
20 the system should grow and evolve at the pace that SDG&E is proposing. In this

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<sup>1</sup> By comparison, PG&E has 19.5% undergrounded and SCE has 39.6% undergrounded.

<sup>2</sup> 67% the substations have SCADA control over distribution (per informal follow up response #8 from the Oct 5 meeting and field visit.) Excluding the 4 kv systems that are being phased out, the percentage would be 86% SCADA controlled on the distribution system.

<sup>3</sup> Master Data request Ch. 3 Q.1 states that there are 226,404 poles; Exh. SDG&E-1 p. MRN-3 states that there are roughly 225,000 poles; Exh. SDG&E-06) p. ABM-211 states that there are approximately 230,000 poles.

<sup>4</sup> Master Data Request Response for Ch. 3 Q.1.

<sup>5</sup> David Geier testimony in A.02-12-028, p. DJG-8.

1 chapter, DRA presents its recommendations for more modest capital additions that  
2 are essentially based upon three year averages.<sup>6</sup> SDG&E's diverse methodologies  
3 for over 100 project numbers<sup>7</sup> are both confusing and weakly substantiated.<sup>8</sup> Over  
4 and over again review of SDG&E's forecast methodology raised more questions

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<sup>6</sup> SDG&E's methodology for projecting future direct costs is based upon a variety of methodologies, including: historical unit costs, historical unit costs with bump ups (ie for electric vehicles), project specific estimates, proactive and reactive assumptions, five year averages, five year averages with bump ups, three year averages, construction unit forecast data, RFP bid processes, contractual agreements with cost sharing provisions, some percentage of transmission costs, etc.

<sup>7</sup> To further complicate matters, SDG&E is relieved from FERC accounting requirements, so the ability to make comparisons with other electric utilities or to create unit costs is prohibited.

<sup>8</sup> Some examples are: 1) for project 99282, SDG&E professes to base its estimates upon replacing 20% of approximately 262 SLP transformers at \$15,500 each. 20% of 262 is 52.4. 52.4 times \$15,500 each amounts to \$812,200. There is no obvious correlation of \$812,200 to the workpapers for budget 99282. 2) for the 13 transmission related projects (9125, 9131, 9132, 9133, 9134, 9135, 9137, 9139, 9148, 9149, 9151, 9160, 9168,) if there is a percentage given, it is not explained how it relates to the larger cost of the project (ie. why 4% or 24% of project costs relate to the distribution system) Nor does SDG&E relate the forecast to the FERC TO case or total costs. How are we to verify that a) SDG&E got the total cost right or the percentage allocation to the distribution system right. 3) for project 215, SDG&E professes to derive projections based upon 5 years of recorded data. From this data they define an average cost per unit. But the underlying data is marked as fully loaded (see DR LLK-16, Q.2). To correct for that, SDG&E rounds up for some reason and then takes some percentage (approximately 64%) to unload the dollars to represent the direct amount. 4) Budget 214 for transformers does not use a unitized cost of transformers. SDG&E would not present a unit cost for transformers (see DR LLK-15, Q.8) 5) many projects have costs added to them due to estimated electric vehicle penetration increases. First off, SDG&E doesn't show the development of the dollar amount nor does SDG&E how it was derived. Therefore, DRA's ability to modify for more moderate EV penetration levels is impossible. 6) in many instances, the SDG&E workpapers do not show prior years expenditures (even blanket accounts) when the supplemental workpaper suggests that there were expenditures prior to 2009 7) while OpEx implications are referenced (ie. increased inspection levels for a period of time) see code 229, the development of the number of increased inspections (from 2009 levels) for 2010 and 2011 are not explained or put into any context. What was estimated when the OpEx systems were envisioned? Is the roll out running better than forecasted or worse? Furthermore, additional data in DR LLK-16 Q.2 do not relate to the recorded numbers in CWP-supplemental A-3. 8) given the multitude of requests for new circuits, substations and reconductors and the reference to the "use of historical unit costs for similar projects" as the forecasting methodology, why aren't those unit costs presented in the workpapers or given in data requests DR LLK-52, Q.4. 9) In code 8263 SDG&E states that the forecast is based on a contractual obligation that involves a cost sharing mechanism with DOE and CEC. Then it goes on to state that SDG&E may increase its contributions to the project, but the increases shall be done on other projects. What does that mean? What did SDG&E assume for forecast purposes? How do the forecasts relate to the contract?

1 than it answered. So rather than recreate 236<sup>9</sup> new forecasts for 2011 and 2012  
2 upon which to derive an estimate for individual project direct expenditures and  
3 capital pooling amounts, DRA dealt with 3 year averages for the clusters of projects  
4 as defined by SDG&E (i.e. capacity, franchise, mandate, new business, reliability  
5 and fire hardening).

6 In summary, SDG&E is asking for \$190 million in 2010, \$246 million in 2011  
7 and \$252 million in 2012, a combined total of nearly \$689 million in direct costs to  
8 install or upgrade its electric distribution system.<sup>10</sup> The electric distribution capital  
9 workpapers present 114 budget codes/projects that support the direct request.<sup>11</sup> To  
10 fully reflect the request per year, one needs to add the indirect costs. Totaling the  
11 direct and indirect costs for electric distribution capital, SDG&E is asking for: \$260  
12 million for 2010, \$332 million for 2011 and \$343 million for 2012.<sup>12</sup> The total  
13 distribution capital request (which includes direct costs and overheads) in 2009  
14 dollars is nearly a billion dollars.<sup>13</sup>

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<sup>9</sup> 118 budget codes times 2. Specifically, for 2010, DRA uses recorded 2010 levels (even if they are higher than the SDG&E forecast); DRA then develops the test year 2012 amounts using a 3 year average of recorded year amounts for 2008, 2009 and 2010. Finally, to determine the 2011 levels, DRA used the mid-point between the 2010 recorded and the test year 2012 amounts.

<sup>10</sup> These amounts do NOT reflect the indirect costs of the projects. SDG&E reports that prior to 2008, these costs (pooled costs) were shown as part of the total project cost. See Marcher testimony p. ABM-257 Ins. 8-9. This statement doesn't corroborate with SDG&E testimony Exh. SDG&E-4 in A.06-12-009. SDG&E presented direct expenditures for electric distribution capital in constant 2005 dollars (except for project 213). Subject to check, Edward Reyes presented testimony on overheads (indirect costs). See <http://docs.cpuc.ca.gov/EFILE/A/62790.PDF>

<sup>11</sup> SDG&E confuses the reader by including some information about project codes 901,904, 905, and 906 in the workpapers, but does not highlight the additional \$247,001,000 in indirect costs in any summary table in the distribution chapter. This leaves the reader with an incomplete understanding of the request. Even after the indirect loadings are added to the capital costs, escalation to nominal dollars will add even more dollars to the request.

<sup>12</sup> Totals were calculated using Exh. SDG&E-6, Table ABM-T-17 on p. ABM-257.

<sup>13</sup> Fully loaded costs include both direct and indirect expenditures and are fully escalated.

**Table 11-1**  
**Summary of SDG&E's Distribution Capital Request by Category**  
**(in \$000 in 2009\$)<sup>14</sup>**

	2010	2011	2012	TOTAL
Capacity/Expansion	19,128	47,080	26,802	93,010
Franchise	19,060	19,175	18,318	56,553
Mandated	31,999	35,987	34,220	102,206
New Business	61,604	80,981	89,977	232,562
Reliability	55,876	54,816	65,634	176,326
Fire Hardening Specific	2,656	8,036	17,479	28,171
<b>Total</b>	<b>\$190,322</b>	<b>\$246,075</b>	<b>\$252,430</b>	<b>\$688,828</b>
<b>With loadings</b>	<b>\$260,050</b>	<b>\$332,304</b>	<b>\$343,474</b>	<b>\$935,829</b>

By any measure, these are large requests and they ought to be tempered because 1) economic times are such that ratepayers should not have to shoulder an unfair burden to produce jobs or carry these increases, 2) customers are scaling back their own capital spending and utilities should also endeavor to do so, and 3) the forecasts are too aggressive.<sup>15</sup> These concerns, coupled with the inadequate workpapers,<sup>16</sup> lackluster data request responses,<sup>17</sup> and shortage of support<sup>18</sup> gives DRA little comfort that the amounts requested are reasonable.

<sup>14</sup> Combination of information from table ABM-T15 and table ABM T17 (see fn. 8 for pages).

<sup>15</sup> The TY 2012 distribution capital request is 49% greater than base year 2009 recorded amounts; and 2012 capital project proposals are almost a 60% increase over recorded 2010 amounts.

<sup>16</sup> Neither workpapers nor supplemental workpapers were given to DRA in an Excel format; DRA had to recreate recorded information in a usable format for over a hundred projects for 6 years of recorded data. Recorded 2009 numbers and prior years' numbers between the workpapers and the supplemental workpapers did not often match up (i.e., account 230, 2252, 5244, 6251, 7144, 8251 to name a few).

<sup>17</sup> MDR Q.12 for distribution, DR 51 Q.1, DR 13 Qs. 8 and 9, DR 15 Q.8, DR 14 Q.11, DR 16 Q.2, DR 42 Q.3, to name a few.

<sup>18</sup> For example, looking at project code 230, the testimony on p. ABM-127 discusses miles of unjacketed cable; in the related workpapers on p. ABM-CWP-38, the number of miles of unjacketed cable do not corroborate. The workpaper amounts in Exh. SDG&E-06-CWP for recorded 2009 and prior years do not map to the supplemental workpaper CWP-supplemental A-14. There is no analysis showing the breakdown of laterals and feeders and what has happened since the last GRC. No explanation was offered as to why the dollars approved in the last GRC cycle were not spent for this area. No assurance was offered that

(continued on next page)

1 SDG&E, in this filing, as in other filings, presents a breakdown of the capital  
2 request into subgroups so that one can look at clusters of projects by either  
3 spending priority<sup>19</sup> or by drivers.<sup>20</sup> While helpful, in theory, if the groupings change  
4 for each GRC cycle (as they have done), it is confusing when one attempts to look at  
5 a longer time horizon. Data request response 26 –LLK Question 1 highlights this  
6 deficiency. When DRA asked the utility to show the recorded 2009 amounts, (the  
7 base year for the filing)<sup>21</sup> for one of its tables, ABM-T14, SDG&E could not provide  
8 the recorded 2009 amounts for these SDG&E defined groupings. Consequently,  
9 DRA sought to create a similar table using table ABM-T15 to ascertain the recorded  
10 information. The numerical system (i.e. numbers jump all around for a given  
11 category),<sup>22</sup> the individualized system of accounting<sup>23</sup> (versus FERC accounting for  
12 other electric utilities), and the “changes” to the way SDG&E presented the capital  
13 projects (loaded versus unloaded; changes in the subgroupings) caused confusion,  
14 severely limited the historical review and impinged on the ability to put the request  
15 into the larger context. Moreover, DRA’s attempts to approach the projects using  
16 unit costs as a basis for gauging progress, determining installation rates or  
17 evaluating costs were also thwarted. Nevertheless, the recorded information, along  
18 with the workpapers, field visits, phone calls and data request responses are the

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this GRC will not be a catch up from the last GRC.

<sup>19</sup> New business, reliability, mandates, capacity, franchise or fire hardening.

<sup>20</sup> Customer growth, safety and regulatory compliance, capacity and reliability, aging infrastructure, new technology, and fire preparedness.

<sup>21</sup> Table ABM-T14 on p. ABM-252.

<sup>22</sup> New substations could be a number like 5244 or 7257; reliability projects are not in a cluster; nor are similarly defined projects in a cluster. So one cannot look at a series of numbers in a spreadsheet and total up numbers for a purpose or of a similar type without a horrific amount of machinations. New circuits could be a number in the 8000 series, the 9000 series or 10,000 series. Looking at the Table ABM-T16 one can see that the project numbering system does not pertain to any discernable grouping pattern. Even blanket accounts do not reside in one number series- they could be in the 200 series, the 900 series or randomly in any other number series.

<sup>23</sup> The last GRC decision, D.08-07-046, in Ordering Paragraph 22 allowed for this accounting.

1 basis upon which DRA makes its recommendations for distribution capital budgets.  
2 The absence of cost/benefits studies, engineering reports, reliability model reports,  
3 linkages to SDG&E's internal decision making processes, discussion about the  
4 selection or cancellation of projects, vendor specifications for items, engineering  
5 drawings, proposed alternatives, and unit cost data<sup>24</sup> made for a less than ideal  
6 presentation from the utility.

7 To highlight some of DRA's challenges in reviewing this filing, DRA received  
8 the following responses in data requests: 1) the revenue requirement from the last  
9 GRC was the result of a settlement, therefore specific capital projects were not  
10 individually authorized;<sup>25</sup> 2) transformer replacement banks are a combination of  
11 specific budget projects and blanket budget purposes, therefore it is not possible to  
12 complete this (historical) comparison;<sup>26</sup> 3) the unique nature of each job, combined  
13 with varied field conditions, make it difficult to unitize the work into units that can be  
14 compared on an apples to apples basis for each budget;<sup>27</sup> and 4) an analysis  
15 comparing the unit cost in the sustainable communities' (photovoltaic or fuel cell)  
16 costs with the costs of either energy efficiency or the cost of incremental supply has  
17 not been performed.<sup>28</sup>

18 Not being deterred, though, DRA reviewed SDG&E's past two GRC filings to  
19 gain a better understanding of groupings and dollar magnitudes. Here is a summary  
20 of the findings, first in dollars (Table 11-2) and then in percentage of total request  
21 (Table 11-3):

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<sup>24</sup> DR 15 Q.8, DR 14 Q.11, DR 16 Q.2, DR 42 Q.3.

<sup>25</sup> DR 14 Q.11.

<sup>26</sup> DR 15 Q.8.

<sup>27</sup> DR 16 Q.2.

<sup>28</sup> DR 42 Q.3.

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**Table 11-2**  
**SDG&E Electric Distribution Capital Requests**  
**Last Three GRCs**  
**(\$ in Thousands)**

	2004	2008	2012
Capacity/Expansion	55,258	30,220	26,802 <sup>29</sup>
Franchise	27,250	20,703	18,318
Mandated	21,740	15,756	34,220
New Business	88,756	59,051	89,977
Reliability	58,195	44,771	65,634
IT	19,247		
Misc	2,037		
Transmission		1,043	
Fire Hardening			17,479
<b>Total</b>	272,483 <sup>30</sup>	171,544 <sup>31</sup>	252,430
	(Loaded)	(Loaded)	(Unloaded)
<b>Number of Projects</b>	121	76 or 77	114

5  
6

<sup>29</sup> Amounts are in unloaded 2009 dollars.

<sup>30</sup> From David Geier testimony in A.02-12-028 p. DLG 7, the amount is in nominal dollars for 2004. The amounts are presumed to be loaded because of claims made in this GRC. Exh. SDG&E-6, p. ABM-257 Ins. 8-9.

<sup>31</sup> From the April 2007 errata testimony of Caroline Winn in A.06-12-009, Appendix A, amounts are in 2005 dollars; SDG&E claims that prior to 2008, pool costs were shown as part of the total project cost. (see Exh. SDG&E-6, p. ABM-257, Ins. 8-9) but it seems more likely that the last GRC presented direct costs (without indirect loadings) in these amounts.

**Table 11-3**  
**SDG&E Electric Distribution Capital Requests**  
**Last Three GRCs**  
**(percentage of total request)**

	<b>2004</b>	<b>2008</b>	<b>2012</b>
Capacity/Expansion	20%	18%	11%
Franchise	10%	12%	7%
Mandated	8%	9%	14%
New Business	33%	34%	36%
Reliability	21%	26%	26%
IT	7%	0%	0%
Misc	1%	0%	0%
Transmission	0%	1%	0%
Fire Hardening	0%	0%	7%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Of the 114<sup>32</sup> project codes currently under review, 39 are blanket budgets.

Assuming 1.4 million customers, SDG&E is asking each customer to invest \$668 for three years of capital for the distribution system alone. This does not include what SDG&E is requesting before FERC for transmission infrastructure investments, nor does it include the amounts it wishes to receive for investing in generation or the indirect loadings for the 114 projects. Moderation is a better approach for the Commission to utilize when deciding the capital budget levels for SDG&E in this GRC; as opposed to the unproven amounts presented by SDG&E. Furthermore, the use of recorded averages is an established methodology that gives more confidence than the unsupported estimates of SDG&E in this case.

## II. SUMMARY OF RECOMMENDATIONS

The following summarizes DRA's recommendations:

- Use the three year average for Test Year 2012 projects where possible.
- Spread out those investments that show up as a chunk in one major year.
- Allocate 50% of the Sustainable Communities costs to either the shareholders or the individual customers where the infrastructure is being placed.

<sup>32</sup> Project numbers 901, 904, 905 and 906 pertain to capital pool indirect loadings.

1 These recommendations result in the following adjustments to SDG&E's  
2 proposed capital expenditures:

3 \$35.668 million less for 2010 (recorded based)

4 \$93.587 million less for 2011, and

5 \$94.048 million less for TY 2012.

6 DRA's direct capital recommendations for distribution are: \$154,654,000 for  
7 2010 (equals the recorded amounts except for an adjustment for sustainable  
8 communities); \$152,488,000 for 2011 and \$158,382,000 for 2012.

9 For the capital pool loadings:

- 10 • Reduce overhead pooling amounts by

11 \$15.348 million in 2010.

12 \$53.085 million in 2011.

13 \$56.383 million in 2012.

### 14 15 **III. DISCUSSION OF SUBCATEGORIES OF CAPITAL PROJECTS**

16 SDG&E presents 41 projects for consideration under the category of  
17 Capacity. This category relates to investments in shunt capacitors, new substations,  
18 new circuits, banks, capacitor upgrades, and reconductoring. There are 5 blanket  
19 accounts within the capacity category that relate to capacity improvements, but only  
20 4 of them have test year dollar requests in them.<sup>33</sup>

#### 21 **A. Capacity Projects**

22 Projects that have been deemed related to capacity have historically been a  
23 bigger portion of the distribution capital budget (18-20% - see Table 11-3). In the  
24 last GRC, SDG&E labeled 38 projects as capacity projects; in the 2004 test year  
25 case, SDG&E labeled 71 projects as capacity. In this GRC, there are 41 projects  
26 under the capacity cost category. Therefore, in terms of number of projects, SDG&E  
27 is presenting a modest number of capacity projects. In terms of forecasted

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<sup>33</sup> It's not clear what account 221 was used for. There are recorded 221 numbers for 2005-2007; budget code 221 did not show up in the capital testimony in either A.06-12-009 or A.02-12-028; the last two general rate cases.

1 expenditures, SDG&E underestimates 2010 levels, turbo boosts the 2011 additions,  
2 and then tempers the test year figure.

3 DRA presents a more logical forecast. DRA uses recorded 2010 levels (even  
4 if they are higher than the SDG&E forecast); and then it uses a 3 year average for  
5 the test year. To determine 2011 levels, DRA used the mid-point between the 2010  
6 recorded and the test year. In DRA workpapers, there are individual budget codes  
7 that get very different treatment than SDG&E is proposing (i.e. more money, less  
8 money, money in different years.) In lieu of performing inadequate analysis on the  
9 71 individual projects with inferior information, DRA chose to review the cost  
10 category as a whole and propose dollar amounts for the entire category. Proxy  
11 assumptions will have to be made to reflect this proposal in the Results of Operation  
12 model, since it is impractical to make more than 10,000 entry changes.

13 Table 11-4 compares DRA's and SDG&E's TY 2012 forecasts of capacity  
14 expenses:

15 **Table 11-4**  
16 **Capacity related Capital Expenditures for 2010-2012**  
17 **(In Thousands of 2009 Dollars)**

Description	DRA Recommended			SDG&E Proposed <sup>34</sup>		
	2010	2011	2012	2010	2011	2012
Capacity	\$25,270	\$24,236	\$23,202	\$19,128	\$47,080	\$26,802

18  
19 The differences between DRA and the Company are: DRA recommends  
20 \$6.142 million more in 2010, and \$22.843 million less in 2011, and \$3.6 million less  
21 in 2012.

## 22 **B. Franchise Projects**

23 SDG&E presents 2 projects for consideration under the category of  
24 Franchise. This category relates to investments in electric street and highway  
25 relocation and the conversion of overhead to underground services. Franchise  
26 efforts have generally been budget codes 205 and 210 for the last three GRC's. The  
27 exception is A.02-12-028, when budget code 2260 was included in the category.

<sup>34</sup> Ex. SDG&E-6, Ch. IV, Table ABM-T8, p. ABM-69.

1 As was done in the capacity section, DRA used recorded numbers for 2010,  
2 used three year averages for test year 2012 determination and used the mid-point  
3 between those two points to arrive at the 2011 levels.

4 Table 11-5 compares DRA's and SDG&E's 2010-2012 forecasts of franchise  
5 related capital expenditures:

6 **Table 11-5**  
7 **Franchise Related Capital Expenditures for 2010-2012**  
8 **(In Thousands of 2009 Dollars)**

Description	DRA Recommended			SDG&E Proposed <sup>35</sup>		
	2010	2011	2012	2010	2011	2012
Franchise	\$6,749	\$10,809	\$14,868	\$19,060	\$19,175	\$18,318

9  
10 The differences between DRA and the utility are: \$12.311 million less in 2010;  
11 \$8.366 million less in 2011; and \$3.45 million less in 2012.

### 12 **C. Mandate Projects**

13 SDG&E presents 7 projects for consideration under the category of  
14 Mandates. This category relates to investments in “non-pole corrective  
15 maintenance”, pole replacement, DOE switch replacement, Load Research (LR) and  
16 Dynamic Load Profile (DLP) metering, replacement of live front equipment with dead  
17 front equipment, capacitor additions, and avian protection.<sup>36</sup> Newly presented  
18 budget codes for this category in this GRC are: 1295, 9168 and 10265. They relate  
19 to 1) the analytic work of the residential photovoltaic segment the Electric Load  
20 Analysis Department, 2) capacitor additions that make sense for certain “loss of  
21 transmission line” reliability requirements, and 3) devices and reconfigurations  
22 designed to prevent avian deaths.<sup>37</sup>

<sup>35</sup> Ex. SDG&E-6, Ch. IV, Table ABM-T12, p. ABM-212.

<sup>36</sup> Prior to 2010, avian protection (10265) was characterized as O&M.

<sup>37</sup> This involves the installation of protective cover-up devices and/or the reconfiguration of SDG&E poles to prevent wildlife from coming into contact with more than one unprotected overhead wire simultaneously. This effort seeks to make SDG&E compliant with federal laws that protect raptors and all migratory birds. Approximately 44,000 poles reside in avian protection areas. SDG&E suggests that 1200 poles per year get retrofitted at a cost of \$1200 per pole.

1 As was done in the capacity section, DRA used recorded numbers for 2010,  
2 used three year averages for test year 2012 determination and used the mid-point  
3 between those two points to arrive at the 2011 levels.

4 Table 11-6 compares DRA's and SDG&E's 2010-2012 forecasts of mandated  
5 related capital expenditures:

6 **Table 11-6**  
7 **Mandate related Capital Expenditures for 2010-2012**  
8 **(In Thousands of 2009 Dollars)**

Description	DRA Recommended			SDG&E Proposed <sup>38</sup>		
	2010	2011	2012	2010	2011	2012
Mandate	\$29,294	\$26,428	\$23,562	\$31,999	\$35,987	\$34,220

9  
10 The differences between DRA and the utility are: \$2.7 million less in 2010;  
11 \$9.559 million less in 2011; and \$10.658 million less in 2012.

#### 12 **D. New Business Projects**

13 SDG&E presents 15 projects for consideration under the category of New  
14 Business. This category relates to investments in electric meters and regulators,  
15 distribution easements, conversion from OH to UG (20B and 20C),<sup>39</sup> transformers  
16 and related infrastructure, OH and UG related to new residential and non-residential  
17 service, customer requested upgrades, sustainable communities, Camp Pendleton  
18 upgrades, and Poseidon desalination plant related upgrades to the distribution  
19 system. New budget codes for this GRC are 8265 and 9276; all other budget codes  
20 refer to blanket accounts.

21 As was done in the capacity section, DRA used recorded numbers for 2010,  
22 used three year averages for test year 2012 determination and used the mid-point  
23 between those two points to arrive at the 2011 levels.

24 The exception to this methodology is the area of sustainable communities  
25 (2264). For this area, DRA suggests that the company only recover 50% of the

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<sup>38</sup> Exh. SDG&E-6, Ch. IV, Table ABM-T11, p. ABM-195.

<sup>39</sup> 211 projects here relate to rules 20 B and 20C; while the franchise projects referred to as 210 relate to 20 A projects and 213 relate to the projects of the city of San Diego.

1 request with ratepayer funding. This project no longer needs 100% ratepayer  
2 funding. SDG&E can design a modified offering where either the shareholders or  
3 the individual customers share in the cost for this effort. This should help alleviate  
4 some of the “backlog” concerns.<sup>40</sup> The sustainable communities concept has been  
5 in effect for three rate case cycles. Without assurances as to the ratepayer benefits  
6 of the monies spent at this juncture, the funding mechanism needs to be revisited.  
7 More analysis should be provided in terms of lessons learned with the program.  
8 More information should be shared related to the targeted goals SDG&E set for itself  
9 and SDG&E’s evaluation of the actual performance of those sites relative to the  
10 expected performance. This is a good time in the program where the utility needs  
11 to present recorded evidence of the benefits of the investments. SDG&E did not  
12 make that showing. Although SDG&E’s workpapers<sup>41</sup> showed no recorded  
13 amounts prior to 2009, the supplemental workpapers showed at least 5 years of  
14 recorded information. DRA is not clear on why funding was so low in 2005 when the  
15 program was approved in December 2, 2004 and the first project was completed in  
16 2004. SDG&E did not analyze or discuss what ratepayers had gained from the  
17 \$432,400 investment of the first project,<sup>42</sup> nor the \$20+ million spent on the program  
18 from years 2005-2010.<sup>43</sup> While project evaluation criteria was alluded to in the  
19 workpapers,<sup>44</sup> nothing more was said about evaluations or performance  
20 expectations in terms of goals set, weighting, prioritization or how projects being  
21 considered were chosen relative to the criteria. Nothing was said about how past  
22 projects inform the decision making process in this rate case. This is unsatisfactory  
23 for a program that SDG&E wishes to expand. Therefore DRA recommends a

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<sup>40</sup> DR 42, Q.5.

<sup>41</sup> Exh. SDG&E-06 CWP p. ABM-CWP-57 for budget code 2264.

<sup>42</sup> See SDG&E Errata Testimony April, 2007, Witness Caroline Winn, page CAW-237, A.06-12-009.

<sup>43</sup> See CWP supplemental A-3 for budget code 2264; April 11, 2011 spreadsheet titled 2010RecordedCapitalExpenditures-SDGE.xlsx delivered by email and <http://www.sdge.com/environment/sustainablecommunities/completedProjects.shtml>

<sup>44</sup> See ABM – CWP-58.

1 reduced budget. With this reduced budget, SDG&E can either fund fewer projects or  
 2 shareholders/the individual customers who receive the facilities can make up the  
 3 difference. If there is a benefit, those specific customers should be willing to pay a  
 4 portion of the cost. As such, DRA recommends 50% funding for budget code 2264.

5 Table 11-7 compares DRA's and SDG&E's 2010-2012 forecasts of New  
 6 Business related capital expenditures:

7 **Table 11-7**  
 8 **New Business Related Capital Expenditures for 2010-2012**  
 9 **(In Thousands of 2009 Dollars)**

Description	DRA Recommended			SDG&E Proposed <sup>45</sup>		
	2010	2011	2012	2010	2011	2012
New Business	\$43,729	\$42,971	\$50,273	\$61,604	\$80,981	\$89,977

10  
 11 The differences between DRA and the utility are: \$17.875 million less in 2010;  
 12 \$38 million less in 2011; and \$39.7 million less in 2012.

13 **E. Reliability Projects**

14 SDG&E presents 34 projects for consideration under the category of  
 15 Reliability. This category relates to investments in 12 blanket accounts that cover  
 16 areas such as: capital tools and equipment, distribution substation, overhead and  
 17 underground distribution service, emergency equipment, removal of 4kv substations,  
 18 power quality, distribution SCADA, replacing obsolete substation equipment, and  
 19 improvements specifically targeted to fire risks in the backcountry. Of the 22  
 20 remaining specific project codes, they relate to reconductoring, Orange county  
 21 reliability upgrades, fiber optic for relay protection and telecommunications,  
 22 substation rebuilds or replacements, microgrid, and others.

23 Comparing this set of reliability projects with the last GRC, one notices that  
 24 there are 19 new budget codes for this GRC and 3 non-blanket codes that were  
 25 references in the last GRC<sup>46</sup> that show up again in this GRC. They are: Escondido

<sup>45</sup> Exh. SDG&E-6, Ch. IV, Table ABM-T7, p. ABM-26.

<sup>46</sup> Appendix A of Caroline Winn testimony for A.06-12-009 pages CAW 295-296.

1 Felicita tap (5153), Lilac, (5247) and Otay substation rebuild (6251). Large dollars  
 2 were represented in Lilac and Otay in the last GRC.<sup>47</sup> The Felicity tap request came  
 3 under another category in the last GRC (transmission). There were only 11 projects  
 4 characterized as reliability projects in the last GRC and they totaled a test year  
 5 request of \$44,771,000.<sup>48</sup> DRA's unloaded projections for 2010-2012 are based  
 6 upon recent historical levels and fall within the loaded levels presented in the last  
 7 GRC.

8 As was done in the capacity section, DRA used recorded numbers for 2010,  
 9 used three year averages for test year 2012 determination and used the mid-point  
 10 between those two points to arrive at the 2011 levels.

11 Table 11-8 compares DRA's and SDG&E's 2010-2012 forecasts of Reliability  
 12 related capital expenditures:

13 **Table 11-8**  
 14 **Reliability Related Capital Expenditures for 2010-2012**  
 15 **(In Thousands of 2009 Dollars)**

Description	DRA Recommended			SDG&E Proposed <sup>49</sup>		
	2010	2011	2012	2010	2011	2012
Reliability	\$49,094	\$47,640	\$46,186	\$55,876	\$54,816	\$65,634

16  
 17 The differences between DRA and the utility are: \$6.782 million less in 2010;  
 18 \$7.176 million less in 2011; and \$19.448 million less in 2012.

19 **F. Fire Hardening Projects**

20 SDG&E presents 14 projects for consideration under the category of Fire  
 21 Hardening. This category relates to investments in replacing wood with steel poles,  
 22 Descanso Barrett, undergrounding in fire threat zones, and meter farm expansion.  
 23 There are numerous new budget codes related to poles in this delineation. (There

<sup>47</sup> See testimony of Caroline Winn in A. 06-12-009 page CAW-165 and 183.

<sup>48</sup> In 2005 dollars.

<sup>49</sup> Ex. SDG&E-6, Ch. IV, Table ABM-T15, p. ABM-129.

1 are also large increases in account 87232 in the mandated section that relate to pole  
2 replacement and reinforcement).

3 Totaling up the pole replacements for the non-blanket project codes, SDG&E  
4 is seeking to replace 1417 poles. SDG&E addresses poles in numerous codes. For  
5 instance, in addition to the poles it proposes to replace under blanket budget code  
6 10263 because they are in “areas of high fire risk,” there are large increases in poles  
7 replaced for “corrective maintenance” in the mandated project code of 87232.

8 It is clear that SDG&E is proposing an aggressive replacement schedule for  
9 poles. Given the fires that occurred in years past, this is not an unreasonable  
10 reaction. But all totaled, SDG&E is seeking \$54.99 million in direct funding for pole  
11 replacement for 2010-2012. This is a threefold increase from the request in A. 06-  
12 12-009. DRA is suggesting a more moderate increase in funding levels related to  
13 poles.

14 As was done in the capacity section, DRA used recorded numbers for 2010,  
15 used three year averages for test year 2012 determination and used the mid-point  
16 between those two points to arrive at the 2011 levels.

17 Table 11-9 compares DRA’s and SDG&E’s 2010-2012 forecasts of Fire  
18 Hardening related capital expenditures:

19 **Table 11-9**  
20 **Fire Hardening Related Capital Expenditures for 2010-2012**  
21 **(In Thousands of 2009 Dollars)**

Description	DRA Recommended			SDG&E Proposed <sup>50</sup>		
	2010	2011	2012	2010	2011	2012
Fire Hardening	\$518	\$346	\$173	\$2,656	\$8,036	\$17,479

22  
23 The differences between DRA and the utility are: \$2.138 million less in 2010;  
24 \$7.69 million less in 2011; and \$17.306 million less in 2012.

### 25 **G. Conclusion**

26 DRA’s recommendations for direct capital costs for distribution are \$35.668  
27 million less than SDG&E for 2010 (recorded based), \$93.587 million less than

<sup>50</sup> Ex. SDG&E-6, Chapter IV, Table ABM-T15 on Page ABM-221.

1 SDG&E for 2011, and \$94.048 million less for the test year 2012. Therefore the  
2 direct capital recommendations for distribution are: \$154,654,000 for 2010 (= the  
3 recorded amounts except for an adjustment for sustainable communities),  
4 \$152,488,000 for 2011 and \$158,382,000 for 2012.

5 DRA's recommendation is reasonable. Many of the proactive efforts that  
6 SDG&E would like to pursue ought to be deferred until the economy rebounds.

#### 7 **IV. DISCUSSION OF CAPITAL OVERHEAD POOLS**

8 SDG&E states that prior to 2008, these loadings were shown as part of a  
9 given project cost. In this GRC, SDG&E is presenting the direct costs and the  
10 loading separately. They are further broken down by four distinct "pools." These  
11 are: 901 (local engineering - ED), 904 (local engineering –substation), 905  
12 (department overhead) and 906 (contract administration). SDG&E suggests that  
13 indirect capital costs are applied consistently and uniformly within a given category,  
14 regardless of whether or not a job is "collectible" or "non-collectible."<sup>51</sup>

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<sup>51</sup> The terms "collectible job" and "non-collectible job" are neither described nor cross referenced in Marcher testimony. A word search in Gary Yee's testimony did not reveal the definition either. Mr. Yee was alluded to in Marcher's workpapers for budget codes 901, 904, and 905.

1  
2  
3

**Table 11-10**  
**Capital Loading for 2010-2012**  
**(In Thousands of 2009 Dollars)**

Description	DRA Recommended			SDG&E Proposed <sup>52</sup>		
	2010	2011	2012	2010	2011	2012
901	\$34,243	\$33,609	\$36,132	\$42,140	\$54,236	\$57,587
904	2,176	2,854	2,518	2,678	4,605	4,013
905	9,359	8,019	9,130	11,517	12,941	14,552
906	8,603	8,603	8,603	13,393	14,447	14,892
TOTAL	54,380	53,085	56,383	69,728	86,229	91,044

4

5 The three year total for these loadings is \$247,001,000. This is a substantial  
6 sum. A sum that certainly deserves more than the 21 lines of text afforded it in  
7 Exhibit SDG&E-6. This is particularly true when SDG&E is presenting information in  
8 a newly disaggregated format. Marcher's workpapers (CWP 45-52) give slightly  
9 more information about the accounts. Each account is described with a slightly  
10 longer description, a listing of typical activities that the labor pool might perform, a  
11 statement of the projected percentage increases, and the dollar amount of capital  
12 spending that receives that particular loading.<sup>53</sup> The exception is budget code 906.  
13 The forecast amount for this account was said to be based upon increases to actual  
14 2009 expenditures, but the workpapers do not adequately explain the base  
15 (\$5,862,000) or the increments chosen for 2010, 2011 or 2012. It suggests that a  
16 portion of the increase is due to increased liability insurance coverage for "certain  
17 electrical contractors,"<sup>54</sup> but it leaves the reader to wonder what the base year  
18 amounts are (\$5,862,000 or \$9,622,000) upon which the random \$5,270,000 is  
19 added. If some 2009 base number plus another number equals 2012, how is 2011  
20 derived? How does the \$5,270,000 number relate to the increased premiums?  
21 How do the number of projects relate to the estimates? DRA was left with many

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<sup>52</sup> Exh. SDG&E-6, Ch. V, p. ABM-257.

<sup>53</sup> Workpapers do not show which specific budget codes receive that particular loading. One can only surmise them by looking at the dollar amounts applicable and compare them to SDG&E's total ED request for that particular year.

<sup>54</sup> CWP – 52 under the heading "Contractor Insurance."

1 questions as to the development of the loadings. While it was helpful to peel them  
2 away from direct costs, without the ability to compare them rationally and reasonably  
3 with the past, its helpfulness to the analytic process was quite limited. As a result,  
4 DRA was left to make its own adjustments based upon its revised distribution capital  
5 numbers. DRA used a ratio approach to derive its numbers.

6 **A. Conclusion**

7 As a result of DRA's distribution capital forecast, DRA also makes  
8 commensurate adjustments to the loadings. They result in the following reductions:  
9 \$15.348 million less in 2010; \$53.085 million less in 2011; and \$56.383 million less  
10 in 2012.