

## PUBLIC UTILITIES COMMISSION

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August 12, 2020

Mr. Dan Skopec  
Vice President, Regulatory Affairs  
SDG&E and SoCalGas  
8330 Century Park Court, CP33C  
San Diego, CA 92123-1530

SUBJECT: Review of the 2019 Risk Spending Accountability Report of San Diego Gas & Electric and Southern California Gas

Dear Mr. Skopec:

The California Public Utilities Commission (CPUC) received the 2019 Risk Spending Accountability Reports (RSAR) from Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E), collectively “the Sempra Utilities,” filed on March 31, 2020. The Sempra Utilities submitted a revised RSAR on June 26, 2020 (Revised Report).<sup>1</sup> Energy Division completed a review of this report and provides the Sempra Utilities with recommendations for its 2020 report. The attachments provide background and details of staff’s analysis.

### CONCLUSIONS

Energy Division (ED) reviewed the Sempra Utilities’ reports and finds that they followed the guidance outlined in Decision (D.) 19-04-020 (the S-MAP Decision, see A.15-05-002). The reports provided a comparison of Sempra Utilities’ CPUC-jurisdictional General Rate Case (GRC) actual and imputed safety, reliability, and maintenance spending. Likewise, the Sempra Utilities correctly applied the selection criteria for their GRC programs found in the S-MAP Decision. The Sempra Utilities provided references, emergent or canceled projects from the Test Year (TY) 2019 General Rate Case (GRC, D.19-09-051) and regulatory account information affecting authorized spending.

Except for SDG&E’s Electric Distribution and SoCalGas’ Gas Acquisition Lines of Business, the 2019 report shows a general pattern of underspending for both utilities. While this is a marked difference from the capital overspending in the 2018 report, Sempra Utilities continued to report operations and maintenance (O&M) underspending. In general, there were only six “Witness Areas” (costs covered GRC testimony) with notable positive variances (Corporate Center O&M and Gas Transmission capital for both companies; SDG&E Gas Engineering Capital and Transmission Capital; SDG&E Information Technology Capital; and SoCalGas Risk Management O&M).

Energy Division concludes that the Sempra Utilities met many of the requirements for this filing. They complied with the reporting notice requirements in D.19-04-020, as it was served on the ED Tariff Unit (edtariffunit@cpuc.ca.gov), CPUC’s Safety Policy Division, Safety and Enforcement Division, and the Public Advocates Office. They also reported spending for their programs related to safety, reliability, and maintenance to conform with D.19-04-020 reporting guidelines. However, the Sempra Utilities continue to exhibit a pattern of underspending, for both capital and O&M, as evidenced by costs shifted between programs, cancelled or deferred projects, and errors in forecasting. This raises questions about the reasonableness of authorized expenditures in light of actual spending, which may be further examined in GRC proceedings. Likewise, ED staff found that the utilities provided authorized and actual work units where available but did not meet the requirement to provide an explanation when a program had no imputed authorized units.<sup>2</sup>

<sup>1</sup> SCG and SDG&E Revised 2019 Risk Spending Accountability Report 6-26-20 Final

<sup>2</sup> IOUs must explain the lack “work unit information for such programs” (D.19-04-020 p39)

RECOMMENDATIONS

ED staff recommend the Sempra Utilities continue to refer to the reporting framework in D.19-04-020, Ordering Paragraph 10 in preparing and submitting future RSARs. The framework applies to all the Sempra Utilities' TY 2020 GRC RSAR filings, the next being on March 31, 2021.<sup>3</sup>

The Sempra Utilities provided explanations and descriptions for the programs and workpapers itemized in the report but should improve on their efforts to include authorized work units or lists of activities when work units are not available. The reports are more useful when the explanations and descriptions contain more details, especially when, as with many IT programs, relatively few activities are safety, reliability, or maintenance related.<sup>4</sup> Staff recommend that variance explanations:<sup>5</sup>

- Identify all mandates;
- Enumerate forecasts;
- Detail any activities cited in workpaper descriptions;
- Detail any costs shifted to other programs;
- Provide enough information to allow programs with no incurred costs to be verified; and
- Go beyond procedural issues, like delayed decisions, to describe what caused the variances.

Sempra Utilities should include information on how parties can file comments in the most recent open GRC/RAMP proceeding, with copies of the comments emailed to ED Tariff Unit. The report should request parties identify the submissions upon which they are commenting. All comments must follow the prioritization outlined in the RSAR Filing and Review Schedule.<sup>6</sup>

Please contact Kevin Flaherty (Natural Gas) at kevin.flaherty@cpuc.ca.gov or (415) 703-3842 or Jenny Au (Electric Costs) at jenny.au@cpuc.ca.gov or (213) 620-6502 if you have any questions.

Sincerely,

 FOR

Edward Randolph  
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Director, Energy Division

Cc: Melissa Hovsepian, Counsel for Sempra Utilities  
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<sup>3</sup> D.19-04-020, Ordering Paragraph (O.P. 9).

<sup>4</sup> *ibid.*, p. 34 and Attachment 2 for discussion of program description and verification.

<sup>5</sup> see Attachment A in this report p. 5

<sup>6</sup> *ibid.*, pp. 47-48

## **ATTACHMENT A: Staff Risk Spending Accountability Review**

The California Public Utilities Commission’s (CPUC) Energy Division (ED) reviewed the 2019 Risk Spending Accountability Reports (RSAR) of Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E), collectively, “the Sempra Utilities.” The Sempra Utilities filed the report in the Safety Model Assessment Proceeding (also known as S-MAP; A.15-05-002/003/004/004), two Risk Assessment Mitigation Phase proceedings (RAMP; I.16-10-015/016, I.19-11-010/011) and the Test Year (TY) 2019 General Rate Case proceeding (GRC; A.17-10-007/008). ED conducted the review to “alert the Commission and other parties about a utility’s risk mitigation activities and spending.”<sup>7</sup> The review verifies compliance with and serves as a demonstration of the ED Review required by D.19-04-020.<sup>8</sup>

### **BACKGROUND**

In December 2014, the CPUC issued D.14-12-025, which directed the investor-owned utilities under its jurisdiction to prepare annual reports comparing authorized and actual spending on risk mitigation projects and explain any discrepancies. Upon submission, ED Staff would review the reports and identify any spending patterns of concern with respect to the provision of safe and reliable gas and electric service.

In D.16-06-054 (O.P. 11), the CPUC ordered the Sempra Utilities to submit interim risk spending accountability reports covering the TY 2016 GRC period. The Sempra Utilities have since served their 2014-2015, 2016, 2017 and 2018 Interim RSARs on the relevant service lists for their respective GRCs. Likewise, ED staff have reviewed and responded to these filings indicating that the Sempra Utilities had met the decision’s requirements.<sup>9</sup> The most recent response was sent out in April 2020.

In April 2019, the CPUC issued D.19-04-020, Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities. The decision provided the Sempra Utilities with specific direction in complying with the reporting requirements of the new risk-based decision-making framework. The Sempra Utilities are scheduled to meet these requirements beginning with the TY 2019 GRC.

### **REPORTING REQUIREMENTS**

D.19-04-020 directed utilities to provide descriptions and an explanation of any variance based upon set criteria.<sup>10</sup> This included identifying all risk mitigation and maintenance<sup>11</sup> programs, providing a “comparison of authorized versus actual spending above an appropriate Commission-determined dollar cut-off and a utility narrative explanation of any significant differences between the two.” Finally, the utilities are required to “group programs along general business lines” or categories.<sup>12</sup>

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<sup>7</sup> D.14-12-025 p. 48

<sup>8</sup> D.19-04-020 p. 46

<sup>9</sup> ED Risk Spending Accountability Report information: <https://www.cpuc.ca.gov/General.aspx?id=6442461400>

<sup>10</sup> *ibid*, (p. 43, Variance Criteria).

<sup>11</sup> In compliance with redirected spending requirements P.U. Code §591 D.19-04-020 (p37).

<sup>12</sup> D.19-04-020 pp 34-37; O.P. 10 and Attachment 2 for the full requirements. See also D.14-12-025 p44.

## STAFF ANALYSIS

The Sempra Utilities derived authorized values from the GRC for reported programs,<sup>13</sup> for which information can be found in the 2019 Report (p 15).

O&M workpapers often include both RAMP and non-RAMP activities.<sup>14</sup> Sempra Utilities imputed at the level of detail provided in workpaper by RAMP activity according to what existed in the record for either the RAMP or GRC proceeding. Where the capital workpapers only represented a single RAMP activity, the activity was easily delineated. However, where no decision adopted values existed, Sempra Utilities derived RAMP amounts separately. Where the GRC request was more than the total for the workpaper, Sempra Utilities transferred RAMP amounts to a different workpaper to reconcile to the totals. The Sempra Utilities did not provide any information on how this affected the variances for the impacted workpapers. ED staff recommend that this type of information be included as a variance with an accompanying explanation.

Sempra Utilities provided examples to show the calculations of the imputed authorized amounts.<sup>15</sup> In each program, Sempra Utilities provided budget information for RAMP and non-RAMP activities and identified the RAMP activities associated with a specific program and the cost of those RAMP activities. The non-RAMP activity budget is determined by subtracting the total RAMP activities costs from the total authorized program budget. Sempra also escalated the authorized amount from 2016 dollar to 2019 dollar using labor and non-labor escalation factors.

	Program Groups	Recorded	Imputed	Variance	Variance %
<b>SDG&amp;E</b>	Electric & Fuel Procurement	7,964	9,349	(1,386)	-15%
	Electric Distribution	173,333	161,896	11,437	7%
	Electric Generation & SONGS	36,664	41,070	(4,406)	-11%
	Gas Distribution	29,345	31,762	(2,417)	-8%
	Gas Engineering (incl TIMP/DIMP)	9,069	11,758	(2,689)	-23%
	Gas Transmission (incl Gas Sys Integ)	5,082	7,171	(2,089)	-29%
	Other	258,064	273,251	(15,187)	-6%
	<b>Total</b>	<b>519,520</b>	<b>536,257</b>	<b>(16,737)</b>	<b>-3%</b>
<b>SoCalGas</b>	Gas Distribution (incl Gas Control)	148,480	164,477	(15,996)	-10%
	Gas Engineering (incl TIMP/DIMP)	140,732	123,851	16,882	14%
	Gas Transmission (incl GT, MP, GSI)	49,214	73,099	(23,885)	-33%
	Underground Storage	53,083	64,365	(11,282)	-18%
	PSEP	8,900	60,582	(51,682)	-85%
	Gas Acquisition	4,687	4,604	84	2%
	Other	408,818	438,511	(29,692)	-7%
	<b>Total</b>	<b>813,915</b>	<b>929,488</b>	<b>(115,573)</b>	<b>-12%</b>

<sup>13</sup> D.19-04-020, p. 35 and 37 (Program Definitions; section 5.1.1).

<sup>14</sup> Sempra provided background on how they imputed these amounts in response to ED inquiries.

<sup>15</sup> ED-DR-02 Consolidated Response Final July 6, 2020, Question 1.

Tables 1 above and 2 below present total spending using the categories defined in D.19-04-020.<sup>16</sup> In addition to SDG&E's Gas Transmission Capital business, three O&M lines of business spent less than their authorized budgets: SDG&E's Electric Distribution lines of business and SoCalGas's Acquisition and Engineering. Meanwhile, nine other lines of business had low negative variances, of which gas distribution and electric generation O&M were most notable. On the other hand, 13 lines of business had significant negative variances, several of which concern important safety and maintenance related projects, including PSEP (capital and O&M), Gas Transmission O&M and Underground Storage capital.

	Program Groups	Recorded	Imputed	Variance	Variance %
<b>SDG&amp;E</b>	Electric Distribution	427,725	634,326	(206,601)	-33%
	Electric Generation	12,314	12,971	(657)	-5%
	Gas Distribution	56,763	110,069	(53,306)	-48%
	Gas Engineering (incl TIMP/DIMP)	47,239	55,747	(8,508)	-15%
	Gas Transmission	11,406	9,253	2,153	23%
	Other	115,233	191,022	(75,789)	-40%
	<b>Total</b>	<b>670,680</b>	<b>1,013,388</b>	<b>(342,708)</b>	<b>-34%</b>
<b>SoCalGas</b>	Gas Distribution	301,934	391,406	(89,473)	-23%
	Gas Engineering	239,215	253,040	(13,826)	-5%
	Gas Transmission	231,283	250,153	(18,870)	-8%
	Underground Storage	135,433	194,002	(58,569)	-30%
	PSEP	66,003	131,027	(65,024)	-50%
	Other	140,072	147,084	(7,012)	-5%
	<b>Total</b>	<b>1,113,940</b>	<b>1,366,712</b>	<b>(252,772)</b>	<b>-18%</b>

Table 3 below summarizes an overall pattern of underspending at both utilities.<sup>17</sup> While underspending on O&M was slight, capital underspending was pronounced.

	Program Groups	Recorded	Imputed	Variance	Variance %
<b>SDG&amp;E</b>	O&M Spend - Electric	217,961	212,315	5,645	3%
	O&M Spend - Gas	43,495	50,690	(7,195)	-14%
	Capital Spend - Electric	440,039	647,297	(207,258)	-32%
	Capital Spend - Gas	115,408	175,069	(59,661)	-34%
	<b>Total</b>	<b>816,903</b>	<b>1,085,371</b>	<b>(268,468)</b>	<b>-25%</b>
<b>SoCalGas</b>	O&M Spend - Gas	405,097	490,978	(85,881)	-17%
	Capital Spend - Gas	973,868	1,219,628	(245,761)	-20%
	<b>Total</b>	<b>1,378,964</b>	<b>1,710,606</b>	<b>(331,642)</b>	<b>-19%</b>

<sup>16</sup> SDG&E and SoCalGas Revised 2019 RSAR ED-DR-01

<sup>17</sup> SDG&E and SoCalGas Revised 2019 RSAR ED-DR-01

Attachment B in this review lists Witness Areas along with the expense and capital spending variances for the 2019 period. It shows that on a program by program basis the Sempra Utilities spent below the imputed authorized amounts for many programs covered in the TY 2019 GRC. Four of SoCal Gas' O&M Witness Areas (PSEP, System Integrity, Major Projects, and Engineering), and two of SoCal Gas' Capital Witness Areas (Gas Major Projects, and Underground Storage), were underspent by between 20 to 85 percent. Likewise, SDG&E's Gas System Integrity O&M, Gas Distribution Capital and Electric Distribution Capital were similarly underspent.

Memorandum accounts or balancing accounts (BA) track many costs detailed in the report. The Sempra Utilities may recover these costs above those authorized in D.16-06-054 at a future date via the annual gas true-up advice letter, GRC or a separate application. Programs subject to balancing or memorandum accounts constitute a significant amount of annual spending and are reviewed in the annual true-up process, the GRC, or a separate application. This RSAR review has taken the additional step of evaluating BA spending in the context of directly authorized spending, such as Integrity Management (see Analysis of Selected Programs items A and E below) and Electric Operations (item K).

The 2019 RSARs come with a set of new requirements, including party comments, work units, activities, and enhanced explanations. D.19-04-020 requires utilities to provide work units or explanations for work completed within each program (O.P. 10) above a variance threshold.<sup>18</sup> The new reporting requirements require utilities to explain why programs did not have work units.<sup>19</sup> The Sempra Utilities reported work units where available, explained work unit variances and provided limited details on program activities in the work paper descriptions.<sup>20</sup> They did not consistently explain why programs had no work units or activities.<sup>21</sup> While the Sempra Utilities did meet the minimum requirements in providing explanations for variances,<sup>22</sup> ED staff found it necessary to request greater detail (see Analysis of Selected Programs below). As with the 2017-2018 ED Review, Staff recommends further improvement to the Sempra Utilities' reporting.

The Sempra Utilities provided information on cancelled, deferred, or expanded programs.<sup>23</sup> SDG&E reported cancelling or deferring 12 projects/activities including many pipeline relocations or improvements. SoCalGas reported cancelling or deferring 14 projects/activities – pipeline technology improvements, hydrotests and equipment installations. Both companies deferred gas station activity, well activity, training, and IT improvements.

While more than 100 projects listed in the RSAR had zero actual spending, or -100% of authorized amounts, the Sempra Utilities did not provide deferred program explanations for them. Responses to ED data requests indicated that underspending is not synonymous with deferral, but instead represents incorrectly forecasted GRC programs, and problems with dependencies or permitting. For example, Major Projects Management & Outreach<sup>24</sup> had a -100% variance because the project was dependent upon another deferred project (see Analysis of Selected Programs item G below). In the case of Records Management,<sup>25</sup> which incurred no costs, SoCalGas described the strategy for the program as being “optimized” without providing any details on how the activities described were no

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<sup>18</sup> D.19-04-020, pp. 36 and 54

<sup>19</sup> *ibid.* Findings of Fact numbers 27 and 28, p. 58.

<sup>20</sup> *ibid.* pp. 38-40, 42

<sup>21</sup> *ibid.* p.39 “Where information on risk mitigation program work units authorized and performed is not available, the IOUs must include in the RSAR general explanations for the lack of inclusion of work unit information...”

<sup>22</sup> *ibid.* p. 42; O.P. 11 and Attachment 2

<sup>23</sup> *ibid.* p. 42.

<sup>24</sup> Revised Report, p. B-25

<sup>25</sup> *ibid.* p. B-32

longer needed (see item H). In other cases, like the Pipeline Safety Enhancement Program (PSEP),<sup>26</sup> spending was lower than forecast because the projects had not been placed into service yet (item B).

In contrast with cancelled or deferred projects, which result in a negative variance, utilities are required to report expanded programming or “emergent projects,” which result in a positive variance of 100%. Expanded programming concerns projects which either broaden the scope of existing activities or add new activities which were not considered in the GRC. SDG&E reported 5 emergent projects, one of which pertained to wildfire related vegetation management, where the program spending is tracked in a two-way balancing account. SoCalGas reported seven emergent projects, of which two were related to pipeline safety enhancement and transmission integrity management programs. The utilities had 5 emergent projects related to non-core functions: customer service, IT, and real estate.

In compliance with the decision, the Sempra Utilities described how each project relates to safety, reliability and/or maintenance. While descriptions did not always provide activities, they usually provided sufficient background to verify that the projects were reportable. ED staff made requests for more information or testimony and references, when necessary.

### PARTY COMMENTS

Three parties to A.17-11-007/008 served comments to the GRC service list and ED Tariff Unit: The Utility Reform Network (TURN), Utility Workers’ Union of America (UWUA) and Protect Our Communities (POC).<sup>27</sup>

POC questioned the use of imputed authorized values, saying they provide no factual foundation for the report and make it hard to identify spending in the RSAR<sup>28</sup>. Though the decision gives no explicit directions on whether utilities can impute amounts to calculate authorized spending, parties to the S-MAP reached a consensus during lengthy discussions. Parties agreed that “the use of budgeted and imputed amounts satisfy the requirement for reporting authorized quantities....”<sup>29</sup> POC provided no assessment of what to use in the place of imputed values. Therefore, ED Staff reviewed the Sempra Utilities’ imputation methods in the context of the second revised staff proposal (see Staff Analysis)<sup>30</sup> and requested more information when necessary (see Analysis of Selected Programs).

POC also questioned the reasonableness of some of the programs included in the review. For example, they stated that “one cannot ascertain which, if any, of SDG&E’s wildfire mitigation proposals are included in the RSAR” since SDG&E filed their 2019 WMP after they filed the TY19 GRC application and therefore, WMP related activities never went through a reasonableness review. POC also contend that the Sempra Utilities used an older approach to identify RAMP related activities. In the context of the report requirements and the scope of this review, ED staff believe these comments would be better addressed either in the course of a GRC proceeding or one of the other proceedings to which POC is a party.<sup>31</sup>

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<sup>26</sup> *ibid.* pp. B-55 and B-57

<sup>27</sup> See Attachment C for full comments and D.19-04-020 pp. 45-47 for requirements on RSAR comments.

<sup>28</sup> Full comments may be found in “2020-05-11 POC Comments on RSAR (A1710007, 008; I1911010, 011)”.

<sup>29</sup> See staff proposal: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M225/K561/225561458.PDF>

<sup>30</sup> The final RSAR format in D.19-04-020 Attachment 2 adopted many of the recommendations from party comments.

<sup>31</sup> For instance, Sempra filed a Petition for Modification (PFM) of A.17-10-007/008 on 4/9/2020.

Comments from Utility Workers' Union of America (UWUA) called out historic labor related underspending at the utility.<sup>32</sup> Their comments pertain to employee safety and support ED staff's assessment of general underspending and the way that accountability reports should include more public participation in fulfillment of Public Utilities Code section 961 requirements. However, their comments mostly pertain to the 2017-2018 report. ED staff recognize UWUA's concerns regarding labor costs and note that the underspending for which they are concerned is also present in the 2019 RSAR. ED staff note that the guidelines outlined in D.19-04-020 (at p.47) meet the requirements in section 961. The UWUA will have another opportunity to voice their concerns about spending and participation during the CPUC proceedings such as the pending petition to modify D.19-09-051,<sup>33</sup> the 2020 RSAR or a subsequent GRC.

Comments from TURN stated that the 2019 RSAR shows evidence of significant safety underspending and argued that either the Commission has been too generous, or the utilities have failed to protect their ratepayers.<sup>34</sup> TURN maintained that much of Sempra Utilities' safety spending is required and chronic underspending undermines their TY 2019 forecast. They also cited the 2018 RSAR ED Review to state that the Sempra Utilities' pattern of underspending would allow "the utility to grow its rate base and earn a higher rate of return."

TURN took special care to note that SDG&E has "overearned by a significant margin" for several years and rebutted the utilities' explanation for the underspending as being in some way related to the late GRC Decision (D.19-09-051).<sup>35</sup> To provide context, they stated that Southern California Edison's (SCE) 2018 GRC decision "was delayed a year and five months (as compared to approximately 10 months for the Sempra Utilities)," but "SCE's overall spending on safety and reliability activities for the 2018 test year was not below the ultimately authorized levels."<sup>36</sup>

Given recent infrastructure problems which can have significant impacts on gas and electricity reliability, ED staff agree with TURN that Sempra Utilities underspending is a concern. The underspending raises questions regarding the level to which the Sempra Utilities are appropriately investing in their systems to maintain safety and reliability, particularly when accounting devices such as balancing and memorandum accounts exist to track all spending for later recovery. ED staff will continue to scrutinize Sempra Utilities spending levels, particularly underspending, in all appropriate rate proceedings and advice letters.

Sempra Utilities often cited delayed decisions from the CPUC as the reason for underspending. In the course of its review, ED staff found that three percent of the line items in the RSAR used the "delayed decision" as an explanation for project variances covering workpapers for safety installations, integrity management, substations, emergency services, control center development and infrastructure improvements. Out of the 500 items covered in the RSAR, SDG&E cited the delayed GRC decision in 9, constituting a total underspending of -\$140 million or -47% on an authorized amount of \$299 million. Likewise, SoCalGas cited the delayed decision in 17 of 423 line items – a total under expense of -\$71 million or -51% on an authorized amount of \$137 million. While the percentage of line items were low, the relative percentage of underspending was high.

Many of the explanations linking the delayed decision to underspending cited high forecasts (e.g., costs, staffing or activity), deferred construction (but not deferred projects) or cost shifting (O&M to capital). While these answers met the minimum requirements to explain the project's variance,

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<sup>32</sup> Full comments may be found in "Utility Workers Response re Division Review - A. 17-10-007 & A. 17-10-00..."

<sup>33</sup> Sempra filed its PFM to implement two attrition years in response to D.20-01-002 (see footnote 31).

<sup>34</sup> See full comments in A17-10-007\_TURN Comments on Sempra 2018 RSAR.

<sup>35</sup> See RSAR section 2.B.iii (p 11) titled "Timing of the TY 2019 GRC Decision.

<sup>36</sup> *ibid.*, p. 3.



they were not always sufficient to understand why Sempra Utilities decided to underspend on any particular program. ED staff often found it necessary to ask follow-up questions (see Analysis of Selected Programs).

Sempra Utilities also cited the delayed TY 2019 GRC decision as idling a project due to its dependence upon another project (e.g., delayed inspections causing delayed pipeline replacements). ED staff found that this type of explanation generally meets the RSAR requirements. However, though it may be a valid reason for underspending, ED staff still found it necessary to request additional clarification to understand the actual barrier to performing required work.

The purpose of the RSAR ED Review is to highlight observations and concerns over safety spending, which parties may use for further inquiry to hold the IOUs accountable in subsequent GRCs. TURN has identified multiyear spending trends as a long-term concern, while the Sempra Utilities claim that the companies under expense will be offset by future spending. In the RSAR section titled “Timing of the TY 2019 GRC Decision”<sup>37</sup> the Sempra Utilities explained they would manage “slow to start” programs over the GRC cycle to address specific program under expenditures. ED staff will continue to monitor whether Sempra Utilities follow through with their stated intention of making up these under expenditures during the ensuing attrition years.

## ANALYSIS OF SELECTED PROGRAMS

ED requests for information covered workpapers pertaining to pipelines, wildfire programming, pole loading, cathodic protection, gas storage, emergency services and records management. Requests generally focused on clarifying variance explanations. While the delayed GRC decision was a subject of inquiry, deferred programming and a lack of work unit information also played a role. Notably, the Sempra Utilities indicated that where costs for a project were described as variant at the workpaper level, it was because they only had to provide greater detail when the GRC authorized a specific number of work units for risk mitigation programs.<sup>38</sup>

ED staff made recommendations such as listing government mandates and explaining the degree to which individual activities contributed to the variances for safety, reliability, or maintenance activities. The results of these inquiries may be found in the sections below:

### **SoCalGas and SDG&E Gas Operations**

#### **A. Line 235 West Sections 1 and 2 (Line 235)**

Considering ongoing concerns over Line 235, ED staff requested clarification on whether the TIMP BA recorded costs for repairs to Line 235 in 2019.<sup>39</sup> SoCalGas explained that the RSAR captures O&M and capital expenditures for Line 235 in the TIMP BA. CPUC had approved SoCalGas’ Advice Letter (AL) 5531 to create the Line 235 Memorandum Account, which tracks project costs. The RSAR<sup>40</sup> states all separately tracked 2019 integrity management activities associated with Line 235 will be filed in a Tier II Advice Letter.<sup>41</sup>

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<sup>37</sup> Report p. 11.

<sup>38</sup> D.19-04-020, pp. 41-43 says costs lacking work units may be rolled up to the workpaper level (see Report p. 9).

<sup>39</sup> ED-DR-02 Consolidated Response Final July 6, 2020, Question 2.

<sup>40</sup> Revised Report, p. B-91

<sup>41</sup> per D.19-09-051

Line 235 is a high-profile case in the SoCalGas system. Regardless of whether it was necessary to provide a full itemization of the program costs (workpapers, budget codes and/or balancing accounts) associated with the line, SoCalGas should have been more explicit in describing whether the costs for all 2019 activities were listed in the RSAR, what portion of the repairs was recorded in PSEP, TIMP, and a mapping of costs between RAMP and the GRC.

### **B. Pipeline Safety Enhancement Program**

SoCalGas states that it left the PSEP program underspent by 95% (\$2.8 million out of \$56.3 million imputed), because 2019 is a transition year and the forecasted costs do not reflect the level of forecasted spending over the GRC cycle. They explained that no pressure test projects were forecasted to be placed into service in 2019 and the large but normalized imputed costs would be spent over the GRC cycle.<sup>42</sup>

To assist in verification, SoCalGas should have disaggregated the \$2.8 million it spent on this program to show the amounts spent on project support, engineering, and design. SoCalGas also should have explained if any authorized project spending from various PSEP projects came into service in 2019 and whether any of the costs for those projects were listed in this RSAR.

SoCalGas should have provided a dollar and percent breakdown of governance and management costs (compliance, work improvement and program control) for the 42% (\$6 million out of \$4.2 million imputed) over-expense incurred by the Project Management Office (PMO).

### **C. Regulator Stations: Regulator Station Improvements and Other**

In response to ED staff requests, the Sempra Utilities indicated that they had made multiple station improvements in the course of the previous GRC cycle and this is borne out by the previous RSARs.<sup>43</sup> However, the 2019 RSAR shows that almost no costs were incurred for most of this workpaper. SDG&E spent a total of \$417,000 out of \$29 million imputed authorized (-99%) for all projects in the workpaper titled Regulator Station Improvements and Other because “individual year expenditures may vary from the annual imputed authorized amounts.”<sup>44</sup>

SoCalGas states that the “variance is associated with new programs that will be managed over the GRC cycle to align with the total authorized levels” but these “new programs” were never identified. SoCalGas also did not provide any explanation of how it will “manage over the GRC cycle to align with the total authorized levels.”

SoCalGas should have provided a verifiable reason for why this program incurred no costs and provided examples of planned capital projects for regulator station improvement “meant to improve safety, provide required code compliance, or improve gas system performance or reliability through the replacement of aging gas pipeline system operating equipment.”

### **D. Cathodic Protection: Requirements for Corrosion Control**

SoCalGas spent \$13 million out of \$17 million imputed authorized (-24%) on Requirements for Corrosion Control in the Cathodic Protection O&M workpaper, because of lower “incurred costs than forecasted as well as a slow ramp up of incremental labor costs.”<sup>45</sup>

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<sup>42</sup> Revised Report pp. 16 and 194-197

<sup>43</sup> ED-DR-02 Consolidated Response Final July 6, 2020, Question 3.

<sup>44</sup> Revised Report, p. A-56

<sup>45</sup> Revised Report, p. B-5

SoCalGas indicated that the number of actual units of work performed for this program was “44,957 orders” but no authorized units are available.<sup>46</sup> ED staff inquired into how activities contributed to the historic cost forecasts and whether the program included any consideration of activity levels. SoCalGas indicated that it did not propose units in the GRC, nor did it calculate units for the forecast or impute units in the report, because it was not required. Rather, it forecasted Cathodic Protection Corrosion Control “based on a trended analysis of historical dollars” which “did not rely on or correlate with a forecast of applicable units/projects...” It is unclear how future spending variances in this program will provide meaningful accountability, if costs cannot be associated with work units.

SoCalGas’ responses to inquiries only allowed for verification of the costs in the report for this program, since there was no concrete way to derive imputed values for activities. Given the importance of mitigating against system-wide pipeline corrosion risks,<sup>47</sup> ED staff recommends that SoCalGas incorporate historic work activities in its calculation of imputed authorized costs to better explain the reported variance, particularly since actual work units are readily provided in the report. This will give an overall better picture of what each program was meant to accomplish compared to what was accomplished. In this case, there were several different types of information presented, but nothing linking them together in a comprehensive manner.

#### **E. Underground Storage: Maintenance work performed on gas storage wells**

For 2019, SoCalGas spent only \$1.2 million out of \$4.4 million imputed authorized (-73%) on Maintenance work performed on gas storage wells in the Underground Storage workpaper because the program was lower than forecasted “due to reprioritization of resources to increased SIMP activities.”<sup>48</sup>

SoCalGas’ clarified that O&M costs covered by the SIMP BA may not include the supervision, engineering, or operations activities found in the Underground Storage workpaper.<sup>49</sup> Hence, money spent on capital work – such as an increase in plugging and abandonment of wells – meant less O&M work – such as well maintenance and security—originally called for in the workpaper.

The explanations for the Underground Storage workpaper did not provide enough detail on why money was diverted from O&M to SIMP BA capital activities. ED staff recommend providing more details on activity levels to explain these types of variances and ease the process of verification.

#### **F. Emergency Services: Safety, Wellness and Emergency Services Support**

SoCalGas explained the Emergency Services -40% variance (\$1.7 million with \$2.9 million imputed)<sup>50</sup> resulted from “lower than forecasted staffing levels” due to the delayed GRC decision.<sup>51</sup> SoCal Gas’ explained that the delay of the GRC decision did not allow enough time to fill requested positions.

The Sempra Utilities spent the money to support SoCalGas’ goals of maintaining comprehensive and coordinated emergency response and recovery programs in compliance with General Order

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<sup>46</sup> ED-DR-03 Response Consolidated, Question 1.

<sup>47</sup> SoCalGas’ GRC testimony says these costs mitigate against top risks in the RAMP Report (SCG-04-R p. GOM-46).

<sup>48</sup> Revised Report, p. B-50

<sup>49</sup> ED-DR-03 Response Consolidated, Question 2.

<sup>50</sup> Revised Report, p. B-18.

<sup>51</sup> ED-DR-03 Response Consolidated, Question 3.

112F (sections 122., 123.j, 143.6) and Title 49 CFR Part 192, section 192.615. The incurred 2019 dollars were to support labor and associated non-labor activities.

### **G. Major Projects: Major Projects Management & Outreach**

For 2019, SoCalGas spent only \$95,000 out of \$1.5 million imputed authorized (-94%) on Real-time Priority Distribution Data and Control in the Major Projects Management & Outreach work paper because the construction of the Distribution Operations Control Center did not start as planned due to the delayed 2019 GRC decision.<sup>52</sup>

SoCalGas stated that the delayed 2019 GRC decision caused the construction of the Distribution Operation Control Center (DOCC) to be delayed and ultimately delayed the O&M charges related to operating and maintaining it.<sup>53</sup> SoCalGas also stated it had to first develop a business plan and start design work before testing and installing the sites as they had detailed in their forecast.

### **H. Records Management: Operational Compliance and Oversight**

SoCalGas incurred no costs for Operational Compliance and Oversight in the Records Management work paper in 2019 (\$1.7 million imputed) because “the strategy was optimized.”<sup>54</sup>

SoCalGas stated the strategy for the program’s implementation was “initiated and is being optimized through the focus on a capital project to develop IT systems and business processes to integrate information from various organizations into a centralized repository.”<sup>55</sup> They explained that Records Management would “support collaboration, information sharing and consistency across organizations such as Gas Engineering, System Integrity, Gas Operations, Construction Management, Pipeline Integrity, Gas Distribution, Gas Transmission, and Storage...” However, the company also said “during 2019, these activities were still being performed by the impacted operating organizations...” It is unclear when SoCalGas plans to implement this strategy.

ED staff had trouble verifying the costs for this project, because these statements seem to be in contradiction. While the report indicated this program was “initiated and being optimized” it also said that the activities were still being performed by “impacted operating organizations.” These responses provide little in the way of explaining why the program incurred no costs. Staff recommend SoCalGas provide more explanation for this large variance on critical records management work.

### **I. Cathodic Protection: System Enhancement**

SDG&E reallocated non-RAMP system enhancement resources, which were variant by -100%, to RAMP activities, because all pipeline integrity activities should be classified as RAMP.<sup>56</sup> However, RAMP activities were still 43% underspent (\$1.5 million out of \$2.7 million imputed) even after the allocation of \$1.7 million to the program because permits required to perform the work were never issued. Hence, some forecast RAMP activities, such as steel renewal, were deferred to year 2020.

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<sup>52</sup> Revised Report, p. B-25.

<sup>53</sup> ED-DR-03 Response Consolidated, Question 4.

<sup>54</sup> Revised Report, p. B-31.

<sup>55</sup> ED-DR-03 Response Consolidated, Question 5.

<sup>56</sup> Revised Report, p. A-53.

When ED staff requested a list of the 39 capital projects cited in the report, the utility revealed it had misidentified 2 projects as O&M and that 3 had been carried over to 2020.<sup>57</sup> This program warrants further review in the future RSARs to verify SDG&E's spending levels for this program. ED staff recommends that the utility provide greater detail when explaining misclassifications or costs are reallocated – especially when the programs are RAMP related safety costs like these. Furthermore, given the nearly three-month lag in the correction of inaccuracies in the original report, the Sempra Utilities should prioritize verification of the accuracy of the information they provide to the CPUC.

### **SDG&E - Electric Operations**

Table 4 below provides a summary of SDG&E's 2019 spending in Electric Operations for operating and maintenance (O&M) and capital programs.

SDG&E underspent the 2019 authorized budget in both O&M and Capital Programs, with up to 50% in its Capital Programs. The highest variance occurs in SDG&E's Capital Distribution spending at approximately 52%, equivalent to \$141 million. It should be noted that SDG&E tracks its wildfire mitigation program (WMP) expenditures in BAs and the totals shown in Table 4 do not include those expenditures. The total Capital Distribution Expenditures including WMP activities show a 33% under-expenditure.<sup>58</sup>

<b>Table 4: Electric Operations (SDG&amp;E) 2019 Total Spending Variance</b>					
	Line of Business	Actual	Imputed	Variance	Variance %
<b>O&amp;M</b>	Electric Distribution	92,852	103,634	(10,782)	-10%
	Generation	36,664	41,070	(4,406)	-11%
	Electric and Fuel Procurement	7,964	9,349	(1,385)	-15%
	<b>Total</b>	<b>137,480</b>	<b>154,053</b>	<b>(16,573)</b>	<b>-11%</b>
<b>Capital</b>	Distribution	130,146	270,311	(140,165)	-52%
	Generation	12,314	12,971	(657)	-5%
	<b>Total</b>	<b>142,460</b>	<b>283,282</b>	<b>(140,822)</b>	<b>-50%</b>
	<b>Total Electric Operations</b>	<b>279,940</b>	<b>437,335</b>	<b>(157,395)</b>	<b>(1)</b>

### **J. SDG&E Electric Distribution Capital at 52% Under-expenditures**

While SDG&E underspent its capital budget, SDG&E explained that a late decision (September 2019) in its Test Year 2019 GRC prevented the utility from initiating many of the projects that were proposed for 2019.<sup>59</sup> SDG&E further stated that the utility will manage the program at the authorized level over the GRC cycle.<sup>60</sup> Table 5 below lists the activities within the Electric Distribution Line of Business with the greatest level of under-expenditures.

<sup>57</sup> ED-DR-03 Response Consolidated, Question 7.

<sup>58</sup> ED-DR-01 2019 SDGE RSAR Tables Q 1-3 Revised, Tab EDC, Line 8.

<sup>59</sup> Revised Report, p. 11.

<sup>60</sup> *ibid*, p. A-29.

<b>Table 5 – SDG&amp;E’s Electric Distribution Activity - Under-Expenditures</b>					
Electric	RAMP Mitigation Activity	Actual	Imputed	Variance	Variance %
Ramp Base - Install SCADA on Line Capacitors	Expand and Maintain Distribution Advanced SCADA infrastructure	206	5,952	(5,746)	-97%
Distribution Circuit Reliability Construction - RAMP	Expand and Maintain Distribution Advanced SCADA infrastructure	527	5,563	(5,036)	-91%
Elect Integrity - RAMP (Non-WMP)	Wire Correction, Switch Replacement and Underground Connector Upgrade Program	177	52,489	(52,312)	-100%
Tee Modernization Program	Non-RAMP	573	6,441	(5,868)	-91%
Replace Obsolete Substation Equipment - RAMP	Substation rebuild/ replacements based on operational significance and SDG&E reliability standards	49	17,023	(16,974)	-100%
RAMP Base - Cable Replacement	Proactive cable replacement	5,404	17,495	(12,091)	-69%
Advanced Energy Storage	Non-RAMP	-	11,241	(11,241)	-100%

## 1. Electrical Integrity Program's Unspent Authorized 2019 Budget

As shown in Table 5,<sup>61</sup> SDG&E minimally spent its authorized budget of \$52 million in the Electrical Integrity Program to correct wire, replace switches, and upgrade underground connectors. The following description was provided for this program:<sup>62</sup>

Pursuant to proposed incremental capital activities described in the 2016 RAMP, this budget code represents a collection of projects implementing safety risk reduction measures in the Electric Infrastructure Integrity (EII) risk area. Several programs addressing key infrastructure improvement projects across electric distribution, substation, and transmission may be implemented as part of this initiative to proactively address the potential for premature asset failure.

Aside from a delayed GRC decision, SDG&E's variance explanation stated that the utility has "re-prioritized a portion of the authorized funds from this program to mitigate wildfire-related risk under the WiSE program."<sup>63</sup> It should be noted that SDG&E's data shows that the utility completed 10% more distribution circuit miles in its Wire Safety Enhancement (WiSE) Program while under-expenditure \$1.8 million (or -28%).<sup>64</sup> The level of under-expenditure in SDG&E's WMP WiSE program does not necessitate a re-prioritization of un-spent funds from the RAMP Integrity Program. In addition, while SDG&E expressed a confidence in its ability to spend the authorized budget over the GRC period, the under-expended amount of \$52 million in this program is over 18% of the SDGE's total 2019 authorized capital budget.<sup>65</sup> Therefore, it may be necessary to re-visit the utility's spending level in this program in future years to determine the appropriate funding level for this program.

## 2. Impacts of Under-expenditure in Tee Connector Modernization Program

SDG&E's inability to complete activities in the Tee Connector Modernization Program may be of concerns to the CPUC and parties due to its impacts on reliability, safety, and customer outages. The program is described as:<sup>66</sup>

This budget provides funding to improve reliability and reduce safety risk by replacing aging 600A Tee connectors on circuits with multiple historical Tee failures and with high fault current. Tee connector failures have become one of the largest contributors to customer outages in the last few years.

SDG&E spent approximately 9% of the total authorized budget in this program to replace 60 Tee connectors.<sup>67</sup> It is unclear how many Tee connector replacements the authorized budget should fund.

## 3. Cable Replacement Program Objective Changed to Reactive

SDG&E also made changes to some program objectives, resulting in spending variances. For example, SDG&E stated that the utility's amendment of its Proactive Cable Replacement Program to reactive replacement resulted in \$12 million under-expenditures. The program is described below:

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<sup>61</sup> ED-DR-01 2019 SDGE RSAR Tables Q 1-3 Revised, Tab EDC

<sup>62</sup> Revised Report, p. A-35.

<sup>63</sup> Revised Report, p. A-30.

<sup>64</sup> Revised Report, p. A-24.

<sup>65</sup> \$52 million divided by \$283 million = 18.3%

<sup>66</sup> Revised Report, p. A-35.

<sup>67</sup> *ibid*, p. A-21

“This project provided funding for the proactive replacement of underground cable that was identified to have a high probability of failure based on electric reliability circuit analysis and cable failure data. It is also required to provide quality customer service and reliability to existing customers by proactively replacing failed cable in the underground cable system.”<sup>68</sup>

A program objective reversal of such a scale may have an impact on system reliability and should be evaluated.

**K. Electric Operations – Balancing Account Program Under-Expenditures**

In electric operations, SDG&E reported three programs with BAs within its distribution line of business to track overhead pools and wildfire mitigation spending. Table 6<sup>69</sup> below shows a total under-expenditure of 14% in SDG&E’s electric operation programs with BAs.

While SDG&E underspent in its capital programs for wildfire management by 8%, the utility’s wildfire mitigation balanced program shows a 35% (\$11.8 million) over-spending for O&M activities.<sup>70</sup> Overall, SDG&E spent \$4 million less (approximately 2%) of the authorized budget in wildfire mitigation programs.

Accounts	Actual	Imputed	Variance	Variance %
O&M WMP Programs	45,972	34,093	11,879	35%
Capital WMP Projects	175,711	191,609	(15,898)	-8%
Capital Overhead Pools	121,868	172,406	(50,538)	-29%
<b>Total</b>	<b>343,551</b>	<b>398,108</b>	<b>(54,557)</b>	<b>-14%</b>

**1. Shifting Focus of WMP Inspection and Preventative Maintenance Program Resulted in 82% Under-expenditures**

SDG&E explained that the utility has changed the focus of its Pole Risk Mitigation and Engineering (PRiME) program from an O&M activity to a capital replacement following results of a pilot program. SDG&E initially planned to use Light Detection and Ranging (LiDAR) flights, process, and engineering analyses in its PRiME program to perform O&M inspection.<sup>71</sup> Upon gathering additional information, SDG&E developed a risk model to replace LiDAR inspection and analysis, which reduced O&M activities. SDG&E’s current experience shows a greater need for capital repairs in this program than forecasted. Hence, the focus of this program has shifted to capital expenditures from O&M activities.

**2. Lower Pole Replacement Number in Accelerated Pole Loading Program due to Planning Activities and Higher Construction Costs**

<sup>68</sup> *ibid*, p. A-34.

<sup>69</sup> Revised Report, p. A-27, A-10.

<sup>70</sup> *ibid*, p. A-10.

<sup>71</sup> ED-DR-02 Consolidated Response Final July 6, 2020, Question 4.



In its Accelerated Pole Loading Program, SDG&E reported a budget under-expenditure of 31% while the number of poles replaced lagged by 61%<sup>72</sup>. SDG&E explained that the disconnect between the budget and unit variance is partially due to the utility's effort to prioritize the replacement of poles in the High Fire Threat District (HFTD).<sup>73</sup> Many of the HFTD poles are not located on paved road, resulting in additional costs due to construction challenges. In addition, SDG&E did not focus on pole replacement and instead used the program budget to fund up-front engineering and design costs to ramp-up activities in the PRiME program. According to SDG&E, the initial investment in engineering and design work will allow the utility to increase pole replacement in the following years. Therefore, the 2020 RSAR review should take into consideration the 2019 spending

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<sup>72</sup> Revised Report, p. A-25.

<sup>73</sup> ED-DR-02 Consolidated Response Final July 6, 2020, Question 5.

## ATTACHMENT B

The following tables show the expense and capital programs (workpapers) for the two companies and the variances in total GRC spending. Variances reference the Sempra Utilities imputed authorized amount.

<b>Table 1: SDG&amp;E Capital Spending 2019</b>						
	GRC Witness Areas	Recorded	Imputed	Variance	Variance %	RSAR Page
<b>Non-Balanced</b>	Electric Distribution 1	130,146	270,311	(140,165)	-52%	A-23
	Electric Generation	12,314	12,971	(657)	-5%	A-39
	Sub-Total Electric	142,460	283,282	(140,822)	-50%	
	Gas Distribution	56,763	110,069	(53,306)	-48%	A-48
	Gas Engineering	495	303	192	63%	A-58
	Gas Transmission	11,406	9,253	2,153	23%	A-63
	Sub-Total Gas	68,664	119,625	(50,961)	-43%	
	Cyber Security	2,177	5,445	(3,268)	-60%	A-84
	Information Technology 1	81,125	63,503	17,622	28%	A-84
	Facilities/Other	22,885	65,600	(42,715)	-65%	A-89
	<b>Sub-Total Other</b>	<b>106,187</b>	<b>134,548</b>	<b>(28,361)</b>	<b>-21%</b>	
	<b>Sub-Total Non-Balanced Capital</b>	<b>317,311</b>	<b>537,455</b>	<b>(220,144)</b>	<b>-41%</b>	<b>page 17</b>
<b>Balanced</b>	Electric Distribution 1	297,579	364,015	(66,436)	-18%	A-28
	Gas - TIMP & DIMP	46,744	55,444	(8,700)	-16%	A-103
	Other - Information Technology 1	9,046	56,474	(47,428)	-84%	A-84
	<b>Sub-Total Balanced Capital</b>	<b>353,369</b>	<b>475,933</b>	<b>(122,564)</b>	<b>-26%</b>	
	<b>TOTAL SDG&amp;E Capital</b>	<b>670,680</b>	<b>1,013,388</b>	<b>(342,708)</b>	<b>-34%</b>	

## ATTACHMENT B (cont)

Table 2: SDG&E O&M Spending 2019						
	GRC Witness Areas	Recorded	Imputed	Variance	Variance %	RSAR Page
<b>Non-Balanced</b>	Electric & Fuel Procurement	7,964	9,349	(1,386)	-15%	A-40
	Electric Distribution 1	92,852	103,634	(10,782)	-10%	A-9
	Electric Generation & SONGS	36,664	41,070	(4,406)	-11%	A-38
	Sub-Total Electric	137,479	154,054	(16,574)	-11%	
	Gas Distribution	29,345	31,762	(2,417)	-8%	A-41
	Gas Engineering	-	-	-	0%	A-58
	Gas System Integrity	326	1,666	(1,340)	-80%	A-59
	Gas Transmission	4,756	5,504	(749)	-14%	A-61
	Sub-Total Gas	34,427	38,933	(4,506)	-12%	
	Accounting & Finance	633	795	(162)	-20%	A-92
	Human Resources	7,017	7,873	(856)	-11%	A-95
	Risk Management	4,086	7,205	(3,119)	-43%	A-93
	Compensation & Benefits	161	279	(118)	-42%	A-92
	Corporate Center - General Administration	72,520	51,709	20,811	40%	A-93
	CS - Field	21,707	25,751	(4,044)	-16%	A-67
	CS - Information & Technologies	14,665	21,924	(7,259)	-33%	A-69
	CS - Office Operations (incl AMO)	24,415	28,039	(3,624)	-13%	A-70
	Cyber Security	9,259	8,217	1,042	13%	A-81
	Information Technology	66,322	84,081	(17,759)	-21%	A-77
	Real Estate & Facilities	32,877	32,335	542	2%	A-87
	Environmental	4,401	5,043	(641)	-13%	A-86
	<b>Sub-Total Other</b>	<b>258,064</b>	<b>273,251</b>	<b>(15,187)</b>	<b>-6%</b>	
	<b>Sub-Total Non-Balanced O&amp;M</b>	<b>429,970</b>	<b>466,238</b>	<b>(36,267)</b>	<b>-8%</b>	<b>page 17</b>
	<b>Balanced</b>	Electric Distribution 1	45,972	34,093	11,879	35%
Electric - Tree Trimming		34,509	24,168	10,341	43%	A-99
Gas - TIMP & DIMP		9,069	11,758	(2,689)	-23%	A-99
<b>Sub-Total Balanced O&amp;M</b>		<b>89,550</b>	<b>70,019</b>	<b>19,531</b>	<b>28%</b>	
<b>TOTAL SDG&amp;E O&amp;M</b>	<b>519,520</b>	<b>536,257</b>	<b>(16,737)</b>	<b>-3%</b>		

## ATTACHMENT B (cont)

<b>Table 3: SoCal Gas Capital Spending 2019</b>						
	Recorded	Imputed	Variance	Variance %	RSAR Page	
<b>Non-Balanced</b>	GRC Witness Areas	301,934	391,406	(89,473)	-23%	B-8
	Gas Distribution	11,636	9,768	1,867	19%	B-24
	Gas Engineering	347	42,673	(42,326)	-99%	B-26
	Gas Major Projects	230,936	207,480	23,456	11%	B-41
	Gas Transmission	66,003	131,027	(65,024)	-50%	B-56
	PSEP	71,315	133,600	(62,285)	-47%	B-49
	Underground Storage	682,171	915,954	(233,784)	-26%	
	Sub-Total Gas	18,219	25,688	(7,469)	-29%	B-74
	Cyber Security	102,285	88,676	13,609	15%	B-73
	Information Technology	19,568	32,720	(13,152)	-40%	B-81
	Facilities/Other	<b>140,072</b>	<b>147,084</b>	<b>(7,012)</b>	<b>-5%</b>	
	<b>Sub-Total Other</b>	<b>822,243</b>	<b>1,063,038</b>	<b>(240,795)</b>	<b>-23%</b>	<b>page 18</b>
	<b>Sub-Total Non-Balanced Capital</b>					
<b>Balanced</b>	Gas - TIMP & DIMP	227,579	243,272	(15,693)	-6%	B-94
	Gas - SIMP	64,118	60,402	3,716	6%	B-95
	<b>Sub-Total Balanced Capital</b>	<b>291,697</b>	<b>303,674</b>	<b>(11,977)</b>	<b>-4%</b>	
	<b>TOTAL SoCalGas Capital</b>	<b>1,113,940</b>	<b>1,366,712</b>	<b>(252,772)</b>	<b>-18%</b>	

## ATTACHMENT B (cont)

<b>Table 4: SoCal Gas O&amp;M Spending 2019</b>						
	GRC Witness Areas	Recorded	Imputed	Variance	Variance %	RSAR Page
<b>Non-Balanced</b>	Gas Distribution	139,780	154,807	(15,027)	-10%	B-2
	Gas Control & System Operations/Planning	8,700	9,670	(970)	-10%	B-17
	Gas Major Projects	1,988	4,301	(2,314)	-54%	B-25
	Gas Engineering	20,495	31,110	(10,615)	-34%	B-19
	Gas System Integrity	14,993	35,582	(20,589)	-58%	B-28
	Gas Acquisition	4,687	4,604	84	2%	B-58
	Gas Transmission	32,233	33,216	(982)	-3%	B-38
	PSEP	8,900	60,582	(51,682)	-85%	B-54
	Underground Storage	39,288	44,041	(4,753)	-11%	B-48
	Sub-Total Gas	271,064	377,913	(106,848)	-28%	
	Accounting & Finance	1,064	1,254	(190)	-15%	B-83
	Human Resources	16,454	20,889	(4,435)	-21%	B-86
	Risk Management	809	315	494	157%	B-84
	Compensation & Benefits	328	777	(449)	-58%	B-83
	Corporate Center - General Administration	78,715	63,114	15,601	25%	B-83
	Advanced Metering	8,975	11,245	(2,270)	-20%	B-59
	CS - Field & Meter Reading	180,412	187,371	(6,960)	-4%	B-60
	CS - Office Operations	36,590	42,145	(5,555)	-13%	B-63
	CS - Information	19,648	24,666	(5,017)	-20%	B-64
	CS - Technologies, Policies & Solutions	3,401	5,294	(1,893)	-36%	B-65
	Environmental	4,490	7,562	(3,072)	-41%	B-77
	Cyber Security	505	763	(258)	-34%	B-71
	Information Technology	21,287	31,458	(10,171)	-32%	B-70
	Fleet & Facilities	20,553	22,745	(2,192)	-10%	B-78
	Supply Management & Supplier Diversity	2,445	3,518	(1,073)	-30%	B-79
	<b>Sub-Total Other</b>	<b>395,675</b>	<b>423,116</b>	<b>(27,440)</b>	<b>-6%</b>	
<b>Sub-Total Non-Balanced O&amp;M</b>	<b>666,740</b>	<b>801,029</b>	<b>(134,289)</b>	<b>-17%</b>	<b>page 18</b>	
<b>Balanced</b>	Gas - TIMP & DIMP	120,237	92,741	27,496	30%	B-89
	Gas - SIMP	13,795	20,324	(6,529)	-32%	B-90
	Other - RD&D	13,143	15,395	(2,252)	-15%	B-90
	<b>Sub-Total Balanced O&amp;M</b>	<b>147,175</b>	<b>128,460</b>	<b>18,715</b>	<b>15%</b>	
<b>TOTAL SoCalGas O&amp;M</b>	<b>813,915</b>	<b>929,488</b>	<b>(115,573)</b>	<b>-12%</b>		

# ATTACHMENT C