

Company: San Diego Gas & Electric Company (U 902 M)  
Proceeding: 2016 General Rate Case  
Application: A.14-11-003 and A.14-11-004  
Exhibit: SDG&E-43, SCG-41

**SDG&E AND SOCALGAS**

**DIRECT TESTIMONY OF DIANA DAY**

**RESPONSE TO THE SAFETY & ENFORCEMENT DIVISION  
RISK ASSESSMENT SECTION  
STAFF REPORT ON  
SAN DIEGO GAS AND ELECTRIC COMPANY &  
SOUTHERN CALIFORNIA GAS COMPANY  
2016-2018 CONSOLIDATED GENERAL RATE CASE  
APPLICATIONS A.14-11-003 AND A.14-11-004**

**April 24, 2015**

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**



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## SUMMARY

This testimony is prepared in response to the California Public Utilities Commission (Commission or CPUC) Safety and Enforcement Division (SED) report titled “CPUC Safety and Enforcement Division Risk Assessment Section Staff Report on Southern California Gas Company & San Diego Gas and Electric Company 2016-2018 Consolidated General Rate Case Applications A.14-11-003 and A.14-11-004” (hereinafter “SED Report”), which was issued on March 27, 2015. My testimony identifies items in that report with which San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas) agree, comment upon the report’s ten recommendations, and lastly in an appendix provide correction or clarification for a small number of items.

Overall, SDG&E and SoCalGas find much support and encouragement in SED’s Report. Both SDG&E and SoCalGas had prepared for this assessment during the course of developing their General Rate Case (GRC) testimonies, having observed the GRC proceedings of the other two major California utilities (Southern California Edison Company and Pacific Gas & Electric Company) that preceded them. It appears that SED understands the difficult and complicated issues arising from the emergent nature of incorporating risk-assessment into the ratemaking process, as well as the adoption of new requirements for the Rate Case Plan arising from the Risk-Framework OIR<sup>1</sup> just recently concluded on December 4, 2014. That decision establishes new requirements for future GRCs, a Safety Model Assessment Proceeding (S-MAP), and a Risk Assessment Mitigation Phase (RAMP) and although not in force for this GRC (that decision having post-dated the Application filing of this GRC), both SDG&E and SoCalGas have proactively sponsored testimony in anticipation of the Commission’s interest in understanding the current state of risk mitigation at the utilities.

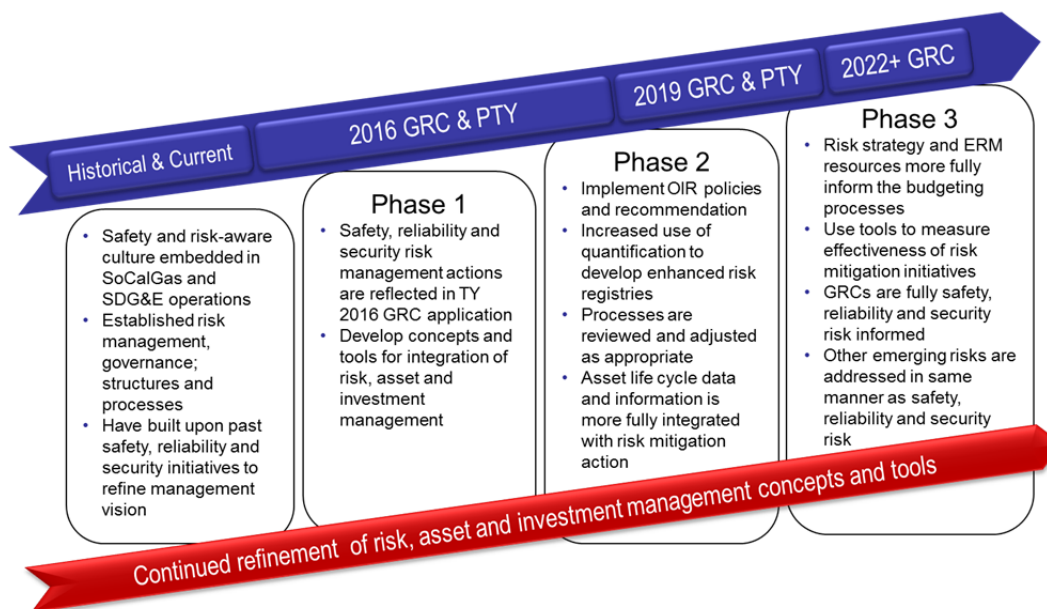
That current state, and the outlook of both SDG&E and SoCalGas, are embodied in a figure taken from my earlier GRC testimonies,<sup>2</sup> shown below and also included in the SED Report<sup>3</sup>:

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<sup>1</sup> R.13-11-006, Decision (D.) 14-12-025, *Decision Incorporating a Risk-Based Decision-Making Framework Into The Rate Case Plan and Modifying Appendix A of Decision 07-07-004*, December 4, 2014.

<sup>2</sup> Exhibit SDG&E-02 at DD-9 and SCG-02 at DD-9.

## SoCalGas and SDG&E Strategic Planning Trajectory (Integrating Risk, Asset and Investment Management)



As the chart above demonstrates, the evolving Enterprise Risk Management (ERM) process will require several GRC cycles to develop and mature, at the same time incorporating the emerging requirements of the new S-MAP and RAMP processes. This diagram and the testimony that supports it depict the continuous engagement we are committing to the process. SDG&E and SoCalGas are encouraged by the general support provided by the SED report.

The SED report reinforces the Commission’s mission “to ensure safe and reliable utility services at an affordable cost”<sup>4</sup> and couples that mission with establishing an optimal level of risk and funding decisions in the GRC context. SDG&E and SoCalGas are steadfast participants in fulfilling the Commission’s and utilities’ joint obligation to provide that safe and reliable service.

<sup>3</sup> SED Report at p. 14, Figure 3 – Phased Approach to ERM Development.

<sup>4</sup> *Id.* at p. 9.

1 **SDG&E AND SOCALGAS**  
2 **DIRECT TESTIMONY OF DIANA DAY**

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4 **RESPONSE TO SAFETY & ENFORCEMENT DIVISION**  
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7 **SAN DIEGO GAS AND ELECTRIC COMPANY &**  
8 **SOUTHERN CALIFORNIA GAS COMPANY**  
9 **2016-2018 CONSOLIDATED GENERAL RATE CASE**  
10 **APPLICATIONS A.14-11-003 AND A.14-11-004**

11 **I. INTRODUCTION**

12 San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company  
13 (SoCalGas) present this response to the document titled “CPUC Safety and Enforcement  
14 Division Risk Assessment Section Staff Report on Southern California Gas Company & San  
15 Diego Gas and Electric Company 2016-2018 Consolidated General Rate Case Applications  
16 A.14-11-003 and A.14-11-004.”<sup>5</sup> This report was prepared by SED in conformance to the  
17 Scoping Memo requirement that it produce a “[r]eport on safety aspects of the applications of  
18 SDG&E and SoCalGas by Safety and Enforcement Division (SED)” by March 27, 2015.<sup>6</sup>

19 This response is divided into three major sections: Supporting Issues, Comments on  
20 Recommendations, and Conclusions. A small number of corrections and clarifications to the  
21 SED Report are contained in the attached Appendix.

22 **II. SUPPORTING ISSUES**

23 SDG&E and SoCalGas acknowledge SED’s support, which will allow both utilities to  
24 develop and mature their risk evaluation processes. The report also provides encouragement  
25 with respect to the upcoming Safety Model Assessment Proceeding (S-MAP),<sup>7</sup> which will allow  
26 the California Public Utilities Commission (Commission or CPUC) and parties to examine,

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<sup>5</sup> Hereinafter “SED Report.”

<sup>6</sup> A.14-11-003 / A.14-11-004 *Assigned Commissioner’s Scoping Memo and Ruling* at p. 9.

<sup>7</sup> As ordered in R.13-11-006, D.14-12-025, *Decision Incorporating a Risk-Based Decision-Making Framework Into The Rate Case Plan And Modifying Appendix A of Decision 07-07-004*, December 4, 2014 Ordering Paragraph 1 at p. 54.

1 understand, and comment on the utility models that identify, prioritize and mitigate risks.

2 SDG&E and SoCalGas support a number of statements presented in SED’s report, including:

- 3 • “It is clear that specific aspects of Sempra’s ERM process are evolving,” acknowledging  
4 the growth and progression of SDG&E’s and SoCalGas’ Enterprise Risk Management  
5 (ERM) activities.<sup>8</sup>
- 6 • The report also acknowledges that “[r]isk can never be eliminated; a risk can only be  
7 mitigated down to an acceptable level. Utilities must seek to optimize risk mitigation in  
8 the context of limited funds and the existence of multiple risks.”<sup>9</sup>
- 9 • The report recognizes the close relationship between some categories of risk that are  
10 difficult to separate, observing that “[s]afety and reliability are distinct aspects of the  
11 Commission’s core mission, but there is an undeniable overlap and intertwining of the  
12 two concepts,”<sup>10</sup> and “. . . fire risk is directly intertwined with reliability risk . . .”<sup>11</sup>
- 13 • “Notably, the results of recent safety surveys conducted by the National Safety Council  
14 indicate SoCalGas and SDG&E are in the 93rd percentile for safety culture.”<sup>12</sup>
- 15 • SED acknowledges that the revised Rate Case Plan provisions of the Risk OIR (R.13-11-  
16 006) are not yet in effect for this General Rate Case (GRC).<sup>13</sup>

17 Regarding SED’s recognition that the ERM process are evolving, SDG&E and SoCalGas  
18 wish to reemphasize that the utilities’ current state of risk assessment operations is not fully  
19 developed, mature or complete. The utilities and the Commission will converge on approved  
20 methods, measures and outcomes, through a regulatory process in which all the parties are  
21 encountering new challenges and opportunities.

22 There are aspects to the occurrence of risk-related incidents over which the utilities can  
23 have some measure of control, while there are others that they cannot, regardless of the  
24 mitigative measures taken or the expenses incurred. SED seems to suggest that mitigation can  
25 prevent risk, in stating: “By identifying such risks, Sempra can seek mitigation measures to  
26 prevent such events that originate externally to Sempra.”<sup>14</sup> However, it is more proper to state as

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<sup>8</sup> SED Report at p. 15.

<sup>9</sup> *Id.* at p. 9.

<sup>10</sup> *Id.* at p. 10.

<sup>11</sup> *Id.* at p. 37.

<sup>12</sup> *Id.* at p. 40.

<sup>13</sup> *Id.* at p. 8.

<sup>14</sup> *Id.* at p. 42.

1 the report does at page 9, “[r]isk can never be eliminated; a risk can only be mitigated down to an  
2 acceptable level.” This is particularly true of risks originating externally to SDG&E and  
3 SoCalGas.

4 In the report there is some discussion about the perceived lack of merit of “relative” risk  
5 scoring, that is, determining a quantified risk value only with respect to other risk values and not  
6 determining an “absolute” risk score, or establishing an acceptable level of residual risk and  
7 allocating funds to optimize among the many risks that present themselves. In the current state  
8 of ERM development, SDG&E and SoCalGas submit that relative risk scoring is a valuable tool,  
9 necessary during that evolutionary process, until more specific and in some instances time-based  
10 information is available to determine quantitative scoring.

### 11 **III. COMMENTS ON RECOMMENDATIONS**

#### 12 **On Relative Risk, Separating Types of Risk, and Risk Quantification and Scoring**

13 It appears that SED is generally supportive of SDG&E’s and SoCalGas’ current process  
14 based on relative risk scores, even as it anticipates the process evolving to become more  
15 quantitative. As stated in the introduction, relative risk scoring can provide value to prioritize  
16 activities and allocate resources. Also, it is a valuable tool in a maturing risk management  
17 process that is open to challenging itself and introducing new concepts for which data might not  
18 be available, or in the format required. SDG&E and SoCalGas find much to agree with in SED’s  
19 recommendations, particularly the concepts expressed in recommendations 2, 3, 4, 7, and 10.  
20 We believe that the upcoming S-MAP and RAMP proceedings will provide the opportunity for  
21 further discussion and clarification of these recommendations.

22 With regard to separating different types of risk, many risk types such as safety and  
23 reliability are not mutually exclusive and convenient boundaries are not evident for  
24 differentiation, particularly if there is causation or correlation among them. SED acknowledges  
25 in the report that “fire risk is directly intertwined with reliability risk.”<sup>15</sup>

26 SDG&E and SoCalGas expect additional detail regarding models of risk scoring to be  
27 addressed during the upcoming S-MAP and RAMP proceedings and/or workshops that will be  
28 requirements for their next GRC. The report itself notes that “[Adoption of a specific risk

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<sup>15</sup> *Id.* at p. 37.

1 assessment methodology or evaluation process] will be the role of the S-MAP proceeding that  
2 will commence with the May 1, 2015, filing of utility proposals.”<sup>16</sup>

### 3 **On Benchmarking and Metrics**

4 The report recommends incorporating industry benchmarking metrics into S-MAP or  
5 GRC proceedings.<sup>17</sup> SDG&E and SoCalGas are mindful that industry benchmarking studies are  
6 largely done in the spirit of cooperation, learning and performance improvement, and data  
7 collection is often done anonymously and with the understanding that results are available only  
8 to member participants. In addition, the data among participants may have variability in format  
9 or definitions, limiting its usefulness in strict comparisons of performance. It is foreseeable that  
10 should these studies be used for regulatory purposes, their level of transparency, cooperation, and  
11 legitimacy could be questioned.<sup>18</sup> We agree that the RAMP and S-MAP processes are  
12 appropriate forums for further discussion of how such metrics can be incorporated into  
13 evaluation methodologies, as SED notes in recommendation 8.

14 SED recommends that SDG&E and SoCalGas consider certification of compliance to  
15 ISO 55001.<sup>19</sup> We agree that the integration of asset management and risk management is an  
16 important element of an enterprise risk management program.<sup>20</sup> It is worth noting that ISO  
17 55001 “Asset Management” does provide a valuable framework for risk-based asset  
18 management, and that a companion standard ISO 31000 “Risk Management – Principles and  
19 Guidelines” is most relevant to the implementation of ERM.<sup>21</sup> SDG&E and SoCalGas will be  
20 evaluating the relative cost and benefit of third-party ISO 55001 certification. Our current GRC  
21 pending before the Commission does not contemplate funding of certification costs.

### 22 **On Specifics of FiRM**

23 SED was unable to ascertain specific locations that SDG&E expects to prioritize under  
24 the Fire Risk Mitigation (FiRM) program’s phasing sequence for wildfire prevention projects.<sup>22</sup>

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<sup>16</sup> *Id.* at p. 8.

<sup>17</sup> *Id.*, Recommendation 8 at p. 45.

<sup>18</sup> SDG&E and SoCalGas are not able to identify the precise source for SED’s observation that SDG&E and SoCalGas “Sempra participates in utility industry benchmarking of safety practices under the auspices of the American Gas Association and the Edison Electric Institute” (SED Report p. 45).

<sup>19</sup> SED Report at p. 43.

<sup>20</sup> See Exhibit SDG&E-02 and SCG-02 at DD-7 – DD-11.

<sup>21</sup> ISO 31000:2009, Risk Management – Principles and Guidelines, see <http://www.iso.org/iso/home/standards/iso31000.htm>.

<sup>22</sup> SED Report Recommendation 5 at p. 44.



1 The FiRM program encompasses many miles of conductor, poles and equipment hardening  
2 projects within the High Risk Fire Area (HRFA) and the wider Fire Threat Zone (FTZ). The  
3 evaluation and prioritization of work is highly dynamic and is a function of many other factors  
4 including current weather, access issues, resource availability, permitting and adjusting to  
5 improved standards. Improvements due to lessons learned, additional system data and work  
6 progress is dynamic, but will allow SDG&E the flexibility to address the highest potential risks  
7 first.

### 8 **Impacts on the GRC**

9 It is important to reiterate that even as SDG&E and SoCalGas have sponsored risk-  
10 related testimony and witnesses in its current GRC, they did so voluntarily and proactively in  
11 anticipation that the Commission would wish such a presentation and as a means to demonstrate  
12 the current state of a developing Enterprise Risk Management process for future GRCs. As the  
13 SED Report observes (text in brackets added):

14 Because this GRC application was submitted prior to the final decision in the Risk  
15 OIR [Nov 14, 2014 and Dec 4, 2014, respectively], Sempra was not required to  
16 follow the framework adopted in the Risk OIR. Consistent with the direction of  
17 D. 14-12-025 [the Risk OIR Decision], however, SDG&E and SoCalGas have  
18 submitted testimony about their Risk Management programs and identified top  
19 risk categories with reference to their proposed safety and reliability investments  
20 as part of their GRC applications.<sup>23</sup>

21 A number of the SED recommendations will require methods not yet in place, and costs  
22 not yet authorized including incorporation of metrics, additional administration for data and  
23 management to satisfy transparency requests, and new recommended reporting requirements.<sup>24</sup>

24 SDG&E and SoCalGas submit that the most appropriate forum to weigh SED's  
25 recommendations is the S-MAP and RAMP proceedings.

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<sup>23</sup> SED Report at p. 8.

<sup>24</sup> If SED recommendations are adopted which are not already part of the current GRC application, SDG&E and SoCalGas recommend establishing a memo account to track any additional costs that are incurred in compliance with those new requirements.

1 **IV. CONCLUSIONS**

2 SDG&E and SoCalGas find much with which to agree in SED’s report, as well as some  
3 supportive statements that portend encouragingly for expectations of the future S-MAP, RAMP  
4 and subsequent GRC proceedings. SDG&E and SoCalGas also find some elements that bear  
5 correction, clarification or both, many of those are addressed in this response. In so doing, and  
6 inasmuch as this is a new facet of the GRC proceedings, SDG&E and SoCalGas do not waive  
7 any rights regarding the option to protest the manner and product of this procedure in this or  
8 future proceedings.

9 The upcoming S-MAP proceeding is expected to further clarify and define the terms,  
10 lexicon and procedures that the major utilities will be expected to adopt in future GRC  
11 proceedings. To that end, SDG&E and SoCalGas are continuing on the developmental course  
12 they determine to be best suited to their individual business circumstances, while being prepared  
13 to adopt changes made necessary by that proceeding.

14 Finally, SED reiterates the opening statement of the CPUC’s document *Regulatory*  
15 *Responsibilities of the California Public Utilities Commission*, which states: “The California  
16 Public Utilities Commission (CPUC) is dedicated to ensuring that consumers have safe, reliable  
17 utility service at reasonable rates, protecting against fraud, and promoting the health of  
18 California’s economy.”<sup>25</sup> Taken together with the statement also found in the SED report that  
19 “[u]tilities must seek to optimize risk mitigation in the context of limited funds and the existence  
20 of multiple risks,”<sup>26</sup> these statements support the Commission’s role in establishing the optimal  
21 level of risk within the constraints of the utilities’ obligations for safe and reliable service and the  
22 funding decisions authorized for those services. The impact of SED’s recommendations may  
23 affect the development of ERM in as-yet undetermined ways; SDG&E and SoCalGas submit that  
24 the proper forum to evaluate those recommendations is the S-MAP and RAMP proceedings.  
25 Too, there remains the uncertainty of outcomes between risk mitigation efforts and actual risk  
26 reduction, also a subject for the S-MAP or RAMP process.

27 Many of the issues identified in the SED report can be attributed to the current state of  
28 the utilities’ ERM development. As demonstrated in the report Figure 3 – Phased Approach to

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<sup>25</sup> Available at: <http://www.cpuc.ca.gov/NR/rdonlyres/7EA9B970-6827-4C89-9D2C-38DD8DE50428/0/CPUCRegulatoryResponsibilities0414.pdf>.

<sup>26</sup> SED Report at p. 9.

1 ERM Development<sup>27</sup> (the “trajectory” diagram), the evolving ERM process will require several  
2 GRC cycles not only to develop but to converge to a state that resolves these issues and is  
3 commonly understood by utilities, regulators and other interested parties. This diagram is taken  
4 directly from my direct testimony on Risk Management and Policy.<sup>28</sup> Both the diagram and my  
5 testimony provide a positive depiction of the continuous engagement that the utilities are  
6 planning to make to the process. SDG&E and SoCalGas are encouraged by the general support  
7 provided by the SED report.  
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<sup>27</sup> *Id.* at p. 14.

<sup>28</sup> Exhibit SDG&E-02 at DD-9 and SCG-02 at DD-9.

1 **V. WITNESS QUALIFICATIONS**

2 My name is Diana L. Day, and my business address is 101 Ash Street, San Diego,  
3 California 92101.

4 In June 2014, I was appointed Vice President, Enterprise Risk Management and  
5 Compliance for SoCalGas and SDG&E. In that role, I am responsible for setting the policy,  
6 governance, structures, process, and guidelines for SoCalGas' and SDG&E's risk, asset and  
7 investment management practices.

8 I have held various positions with the Sempra companies since 1997, including Assistant  
9 General Counsel – Commercial of SDG&E (until June 2014), General Counsel of Sempra  
10 Energy Global Enterprises and Vice President and Associate General Counsel of Sempra Energy.

11 I received a bachelor's degree in economics (summa cum laude) from Washington State  
12 University. I received a juris doctor degree from the University of Virginia School of Law.

13 Prior to joining Sempra Energy, I was an attorney with the San Diego office of Latham &  
14 Watkins, where I served on that firm's Equal Employment Opportunity Committee. I also have  
15 prior service as a director of the San Diego American Corporate Counsel Association, the San  
16 Diego Volunteer Lawyer Program, and San Diego Imperial County Girl Scouts.

17 I have not testified previously before the Commission.

## APPENDIX – CORRECTIONS AND CLARIFICATIONS TO SED’S REPORT

A number of corrections and clarifications to the report are identified by page number as follows:

SED Report Page No.	SED Statement from Report	SDG&E’s Correction or Clarification
Throughout	Usage of “Sempra”	The usage of “Sempra” should be replaced with “SDG&E” and “SoCalGas.” Both SDG&E and SoCalGas are not the same as Sempra, which is a separate legal entity.
9	“Risk is typically defined as the probability of an event occurring (in this context, an event is a hazard or a threat to the SoCalGas distribution system, or to SDG&E’s electric generation, transmission or distribution system) multiplied by the consequence (or impact) should that event occur.”	There is not a conclusive agreement on how risk is typically defined. ISO 31000 defines risk as the effect of uncertainty on objectives. “Probability multiplied by consequence” is a method to calculate a relative risk score in order to differentiate one risk from another, rather than a typical definition.
13-14	“The GRC request seeks funding for nine (9) Full-Time Equivalent positions . . .”	To clarify, as a shared-service organization, this GRC request is for and incremental nine (9) FTEs (an incremental 4 at SDG&E over the 5 already present in 2013, and an incremental 5 at SoCalGas).
17	“Sempra described its formula in general terms, basically as adding together the square of the Frequency score and the Impact score, then taking the square root of the sum to develop an Inherent Risk score.”	This is not used uniquely here; it is also how SDG&E and SoCalGas score residual risk.’
17	“Sempra’s method of using relative risk scores to establish risk mitigation priorities should be considered an early approach to risk evaluation.”	SED provides no supporting citation for this conclusion; SDG&E and SoCalGas use risk scores to relatively rank and differentiate one risk from another, rather than to establish risk mitigation priorities.
33	Footnote 28: SDG&E-03, pg. 7	Footnote 28: SDG&E-09, p. JDJ-118
35	<ul style="list-style-type: none"> <li>• TL13821 and 13828 Fanita Junction enhancements \$600,000;</li> <li>• TL13833 wood to steel replacement of 6 poles between Pico and Trabuco substations, \$250,000.</li> </ul>	<ul style="list-style-type: none"> <li>• TL13821 and 13828 Fanita Junction enhancements <del>\$600,000</del> <u>\$628,000</u>;</li> <li>• TL13833 wood to steel replacement of 6 poles between Pico and Trabuco substations, <del>\$250,000</del> <u>\$259,000</u>.</li> </ul> <p>See Exhibits SDG&amp;E-03, pp. 145 and 147, respectively.</p>

SED Report Page No.	SED Statement from Report	SDG&E's Correction or Clarification			
43	"Similarly, Sempra's Cyber Security program appears to have a focus on IT Cyber Security, and less of a focus on Industrial Control Systems (ICS), Control System Design, Procurement, and Firmware Update Management."	SDG&E and SoCalGas do have a risk registry entry addressing ICS (i.e. SCADA), titled "Cyber Security - Energy Flow Infrastructure" whose description is "A major cyber security incident that causes disruptions to electric or gas operations (e.g. SCADA system)". That entry is contained in the same documents cited by SED in footnote 18 at page 18,"Response to Data Request on Key Risks faced by SDG&E and SoCalGas.'			
29	Table 1 Safety & Risk Management Capital Projects (Fire Specific/Related*) (\$000)				
		<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
	*Aerial Marking/Light	140	140	140	<u>420</u>
33	Table 2 – Projected GRC Spending on FiRM Projects 2014-2016				
	<b>FiRM (\$000)</b>	<b>2014 (est)</b>	<b>2015 (est)</b>	<b>2016 (est)</b>	<b>Total</b>
	<b>Phase 1 &amp; 2</b>	13,056	<del>42,700</del> <u>12,780</u>	12,496	<del>38,252</del> 38,332
	<b>Phase 3</b>	11,045	24,323	44,950	80,318
	<b>Total</b>	24,101	<del>37,023</del> <u>37,103</u>	<del>94,469</del> <u>57,446</u>	<del>118,570</del> <u>118,650</u>