

Decision 18-04-016 April 26, 2018

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

Order Instituting Investigation Into the November 2016 Submission of San Diego Gas & Electric Company's Risk Assessment and Mitigation Phase.	Investigation 16-10-015
And Related Matter.	Investigation 16-10-016

**DECISION CLOSING RISK ASSESSMENT AND MITIGATION PHASE PROCEEDINGS****Summary**

Under the procedures adopted in Decisions 14-12-025 and 16-08-018, San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas) were required to file their Risk Assessment Mitigation Phase (RAMP) report instant proceedings. The Safety and Enforcement Division reviewed the RAMP report for compliance. Parties were given the opportunity to file comments. The RAMP filings and comment process then formed the basis of SDG&E's and SoCalGas' assessment of their safety risks in their next respective General Rate Case (GRC) filings.

This process is now complete and today's decision closes these RAMP proceedings. SDG&E and SoCalGas incorporated RAMP results into their respective Test Year 2019 GRC applications. Testimony included in the Test Year 2019 GRC applications contain sections pertaining to RAMP and an assessment

of feedback from the RAMP process. Proposed spending for safety mitigation activities and the efficiency of risk mitigation funding are to be reviewed in the Test Year 2019 GRC applications

The RAMP process had positive impacts on SDG&E's and SoCalGas' risk management procedures. Key safety risks and proposed mitigation activities were more thoroughly reviewed, assessed, and analyzed. The RAMP process brings safety to the forefront so that potential mitigations and proposed spending to further reduce risk to the public, employees, and contractors can be more thoroughly reviewed in the GRC applications.

## **1. Procedural Background**

On October 27, 2016, the Commission opened an Order Instituting Investigation (OII) into the November 2016 submission of San Diego Gas & Electric Company's (SDG&E) Risk Assessment and Mitigation Phase (RAMP).<sup>1</sup> The Commission also opened an OII into the November 2016 submission of (SoCalGas RAMP on October 27, 2016. The two OIIs were opened to allow the Commission to review the RAMP submissions of SDG&E and SoCalGas. On November 17, 2016, the two OIIs were consolidated pursuant to a ruling from the assigned Administrative Law Judge (ALJ). On November 30, 2016, SDG&E and SoCalGas filed their RAMP report (RAMP Report).

A joint Prehearing Conference (PHC) statement was filed by SDG&E and SoCalGas on December 9, 2016 while Mussey Grade Road Alliance (Mussey Grade) filed its PHC statement on December 12, 2016. Mussey Grade also filed a motion for party status on December 13, 2016, which was granted by the ALJ

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<sup>1</sup> SDG&E and Southern California Gas Company (SoCalGas) sent separate letters to the Commission's Executive Director on September 1, 2016, requesting that these OIIs be initiated.

ruling on December 14, 2016. On December 13, 2016, a workshop was held at the Commission Auditorium to discuss the RAMP report filed by SDG&E and SoCalGas. On December 14, 2016, SCGC filed a motion for party status which was granted in the ALJ Ruling dated December 27, 2017. On December 15, 2016, a PHC was held to discuss the scope, schedule and other procedural matters.

On January 11, 2017, the assigned Commissioner issued a Scoping Memorandum and Ruling (Scoping Memo) setting forth the procedural schedule, identifying the issues to be considered in this proceeding, the need for hearings, and addressing other procedural matters. On January 20, 2017, SDG&E and SoCalGas filed an appeal to the categorization of the proceeding. The Office of Ratepayer Advocates (ORA), Office of the Safety Advocate (OSA), and The Utility Reform Network (TURN) filed separate Responses on January 31, 2017, opposing the appeal to categorization by SDG&E and SoCalGas. On February 10, 2017, the assigned ALJ issued a ruling denying the appeal to categorization and the categorization remained as ratesetting.

On March 9, 2017, the assigned ALJ issued a ruling including the report by the Safety and Enforcement Division (SED) commenting on the RAMP Reports by SDG&E and SoCalGas in the record of the proceeding. The ruling also allowed parties to file comments on the RAMP report and SED's report (SED Report). A workshop was held on March 15, 2017 to discuss the SED Report.

On April 17, 2017, comments were filed by Mussey Grade, Coalition of California Utility Employees (CCUE), and OSA. The time for filing comments was extended by the ALJ ruling dated April 24, 2017 and comments were filed on April 24, 2017 by ORA, Utility Consumers' Action Network (UCAN), SDG&E and SoCalGas, and Indicated Shippers and Southern California Generation

Coalition. Reply comments were filed on May 9, 2017 by UCAN, OSA, CCUE, SDG&E and SoCalGas, Indicated Shippers, ORA, and TURN.

On October 6, 2017, SDG&E and SoCalGas filed their respective General Rate Case (GRC) applications for Test Year (TY) 2019.<sup>2</sup>

On February 18, 2018, the assigned ALJ issued a ruling requesting additional information from SDG&E and SoCalGas.

SDG&E and SoCalGas filed a motion to close the proceedings on March 5, 2018. The additional information requested in the February 18, 2018 ALJ ruling was included with the motion. TURN filed a response to the motion on March 20, 2018.

## **2. Purpose of RAMP**

In Decision (D.) 14-12-025, the Commission adopted a risk-based decision-making framework into the Rate Case Plan for large energy utilities' GRCs. D.14-12-025 specifically describes the purpose of RAMP as follows:

The purpose of the RAMP filing will be to review the utility's RAMP submission for consistency and compliance with its prior S-MAP, and to determine whether the elements contained in the RAMP submission can be used in the utility's GRC filing to support its position on the assessment of its safety risks, and how it plans to manage, mitigate, and minimize those risks in the context of the utility's upcoming GRC application filing.<sup>3</sup>

The procedures adopted in D.14-12-025 and D.16-08-018 required SDG&E and SoCalGas to file their RAMP submissions into these OIIs which SED will review for consistency and compliance with the Safety Model Assessment Proceeding (S-MAP). Parties to the OIIs were given an opportunity to comment

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<sup>2</sup> A.17-10-007 and A.17-10-008.

<sup>3</sup> D.14-12-025 at 38.

on SDG&E's and SoCalGas' RAMP submissions as well as SED's report. The RAMP filing and comment process then formed the basis of SDG&E's and SoCalGas' assessment of their safety risks in their next respective GRC filings.

As described in

D.14-12-025, no decision is expected to be issued in these proceedings<sup>4</sup> and this decision only serves to close out these RAMP OIIs.

In D.16-08-018<sup>5</sup> the Commission adopted guidelines for what the RAMP submissions should include, as well as an evaluation method by which to evaluate the RAMP submissions. D.16-08-018 summarized the required information described in D.14-12-025 as follows:

- The utility's prioritization of the risks it believes it is facing and a description of the methodology used to determine these risks;
- A description of the controls currently in place as well as the baseline costs associated with the current controls;
- The utility's prioritization of risk mitigation alternatives, in light of estimated mitigation costs in relation to risk mitigation benefits (Risk Mitigated to Cost Ratio);
- The utility's risk mitigation plan, including an explanation of how the plan takes into account: utility financial constraints; execution feasibility; affordability impacts; and any other constraints identified by the utility; and
- For comparison purposes, at least two other alternative mitigation plans the utility considered and an explanation of why the utility views these plans as inferior to the proposed plan.<sup>6</sup>

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<sup>4</sup> OIIs at 4-5.

<sup>5</sup> D.16-08-018 is the Phase 1 decision in the S-MAP proceeding.

<sup>6</sup> D.16-08-018 at 135-36.

D.16-08-018 also required the following additional information:

- Identify lessons learned in the current round to apply in future rounds;
- Move toward probabilistic modeling as much as possible;
- For those business areas with less data, improve the collection of data and provide a timeframe for improvement;
- Describe the company's safety culture, executive engagement, and compensation policies; and
- Respond to immediate or short-term crises outside of the RAMP and GRC process.<sup>7</sup>

### **3. RAMP Report, SED Report, Comments, and Workshops**

SDG&E's and SoCalGas' RAMP Report provides a baseline assessment of safety risks to the public, their employees and their systems, and what potential mitigation measures have been considered.

The approach adopted by SDG&E and SoCalGas integrates the following:

- SoCalGas and SDG&E are not requesting dollar approval as part of the RAMP filing;
- In order to provide a comprehensive view of the risks addressed within the RAMP filing certain non-CPUC jurisdictional risks and associated costs have been included in the filing, but these will not carry over to the GRC filing;
- The analysis and the resulting order of priority of mitigations were performed at the individual risk level, not across all risks;
- The RAMP filing includes mandated compliance controls and mitigations, as well as ones identified by the utilities; and

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<sup>7</sup> D.16-08-018 at 151-152.

- Ongoing spending on controls is needed to maintain the current levels of residual risks.<sup>8</sup>

In deciding which risks are to be incorporated into the RAMP Report, SDG&E and SoCaGas utilized a risk framework composed of a 7 x 7 matrix of risk categories. For each of the categories, SDG&E and SoCalGas assigned a risk score between ranging from 1 (insignificant) to 7 (catastrophic). The risks that received a score of 4 or more in the Safety, Health, and Environment categories were then selected for inclusion. This resulted in a total of 28 RAMP risks, broken down into 8 risks for gas, 8 for electric, and 12 cross-cutting risks.

SDG&E and SoCalGas then identified existing controls and proposed mitigations for each of these 28 risks. In some cases, a particular risk had a large number of controls and proposed mitigations attached to it. In estimating costs, SDG&E and SoCalGas planners selected an applicable methodology either by selecting a current activity that is similar and applying current or historical costs, or applying a zero-based cost estimate<sup>9</sup>. Estimated costs were presented as a range estimate incorporating the likelihood of variations in scope, schedule, and resource availability. As required by D.16-08-018, SDG&E and SoCalGas included a risk spend efficiency (RSE) or a calculation of risk reduction per dollar spent.

In sum, separate risk mitigations plans were developed for each of the 28 RAMP risks. Each mitigation plan includes the following:

- Purpose and definition of the risk;

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<sup>8</sup> RAMP Report at A-2.

<sup>9</sup> A zero-based cost estimate is a method of budgeting in which the estimate starts from zero dollars and then all activities to be included and their underlying costs are analyzed and justified without regard for whether the resulting estimate is lower or higher than prior years.

- Background and additional information to provide factual and where appropriate, legal context for the risk;
- Risk information including a description of the risk classification, potential risk drivers, and potential consequences;
- Risk score describing the reasonable worst case event chosen to develop the risk score and an explanation of the assigned risk scores by impact area and frequency;
- Baseline risk plan identifying the controls and mitigations established as of 2015 to address the risk; and
- Proposed risk plan containing the controls and mitigations proposed to enhance or expand risk management activities.<sup>10</sup>

SED conducted an analysis of select portions of the RAMP Report. SED clarifies that the report analyzes how well the utilities have described their approach and outcomes but that the report is not intended to make a determination of whether projected funding for mitigations is reasonable. SED's Report also does not analyze each of the risks identified by the RAMP Report but instead focuses on providing a summary of the risk chapters in light of their apparent strengths and areas in need of improvement. According to the SED Report, the risks identified in the RAMP Report offer a complete description of risk scenarios and proposed mitigation measures and provides a reasonable basis for understanding the intent of the mitigations and how they might be able to reduce the impact or frequency of the incidents.

However, the SED Report also identifies areas for improvement and states that there is a lack of clearly defined mitigation alternatives, a lack of

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<sup>10</sup> RAMP report at A-10.



risk-reduction analysis, and RSE calculations for these alternatives. The SED Report also specifies that several proposed mitigations need more explanation showing the correlation between the risk and the mitigations proposed.

The SED Report identifies several areas where the information presented in the GRC filings may be improved with most of the suggestions relating to RSE. Lastly, The SED Report adds that there should be more detailed explanation explaining how proposed mitigations are tied to funding requests in the GRC and how incremental dollars address safety and risk mitigation.

Various parties filed comments to both the RAMP Report and the SED Report. Many parties are in agreement that as the pilot RAMP filings, these proceedings provide a significant advancement in quantitative risk analysis. The risk rankings and proposed mitigations provide more data, information, and analysis regarding SDG&E's and SoCalGas' methodologies in assessing risks and how to mitigate those risks.

Most of the parties agree with SED's analysis regarding the limitations of the risk management methodologies in the RAMP Report and comments from various parties provided criticisms to the RAMP Report. TURN criticizes that the utilities did not provide sufficient information that shows in a transparent manner how decisions are made regarding risk mitigations how these are ranked and prioritized. OSA states that the RAMP Report should be more detailed and that there should be an improvement on how risks are scored. ORA, OSA and Indicated Shippers agree with CUE that discussion of alternative mitigation proposals was lacking. TURN, SCGC, and Indicated Shippers add that the RAMP process should not be relied on as a determinate factor in addressing the reasonableness of proposed projects in the GRC.

Many criticisms were directed at the RSE portion of the RAMP Report. Mussey Grade, UCAN, and ORA point out that the RSE needs to be refined and that the RSE calculation should be based on more reliable data and quantitative information and should not rely heavily on subjective information such as information derived from subject-matter experts. TURN points out that there are flaws and problems with the RSE calculations and analysis of alternatives. UCAN adds that there is no basis to determine which of the proposed mitigation activities are the most cost effective. All parties, including SDG&E and SoCalGas, agree that the present RSE calculations should not be used as the ultimate decision-making tool to assess utility spending proposals in SDG&E's and SoCalGas' TY2019 GRC and for developing GRC forecasts.

Many of the parties however recognize that these RAMP filings are the first of their kind. Parties agree with SED that these RAMP filings have been useful but that additional work on the RAMP process is needed and that the RSE metric needs to be further developed. The SED Report adds that the focus of the report was to provide guidance on how SDG&E and SoCalGas might bolster information and justifications for proposed spending plans. The SED Report also states that the RSE concept has not been completely developed in the S-MAP proceeding and the RAMP Report represents the first attempt to quantify RSE for identified risks as a way of measuring the impacts of mitigations.

CCUE believes that SDG&E and SoCalGas put forth a reasonable showing for these first RAMP filings and that stakeholders should work together to improve the process. ORA adds that RAMP is an ongoing and evolving process and that these pilot RAMP filings provide a good starting point.

As discussed in the Background section of this decision, workshops were held on December 13, 2016 to discuss the RAMP Report and on March 15, 2017,

to discuss the SED Report. In both workshops, parties were given the opportunity to ask questions and provide feedback.

#### **4. SDG&E Hardening Inspection and Repair Programs**

Mussey Grade raised an issue concerning adequate analysis of SDG&E's hardening inspection and repair programs which constitute a large percentage of SDG&E's proposed wildfire mitigation spending. We agree with Mussey Grade that requests in SDG&E's TY2019 GRC relating to these programs should be reviewed in the GRC proceeding.

#### **5. Integration of RAMP into GRCs**

The final step in the RAMP process is for SDG&E and SoCalGas to integrate its RAMP filing and comments from SED and intervenors into its GRC applications, specifically, in the assessment of safety risks and proposed mitigations.

SDG&E and SoCalGas filed their respective GRC applications on October 6, 2017. Appendix A to this decision shows a mapping between the TY2019 testimony and RAMP risks (Appendix A.1) and of GRC witness sponsoring RAMP costs (Appendix A.2). The GRC testimony includes an assessment addressing feedback from the RAMP process and a summary of the RAMP showing in the TY2019 GRCs.<sup>11</sup> There is also testimony that discusses the process utilized to integrate the RAMP results into the TY2019 GRCs.<sup>12</sup> In addition, each GRC witness sponsoring RAMP-related activities included RAMP sections in their testimony that explains which risk is covered, how mitigation activities impact the risk, and forecasted RAMP requests. Workpapers provide

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<sup>11</sup> Testimony sponsored by Diana Day.

<sup>12</sup> Testimony sponsored by Jamie York.

discussion of the benefit of sponsored mitigation activities and discusses any alternatives that were considered. SDG&E and SoCalGas assert that their RAMP evaluation and showing for the TY2019 GRC was influenced by feedback from the SED and intervenors and that feedback regarding specific mitigation activities are addressed in witness testimony.<sup>13</sup>

The integration of findings from the RAMP process into SDG&E's and SoCalGas' TY2019 GRC applications completes the RAMP process and no further action in these proceedings is required. RAMP-related testimonies, the level and amount of safety mitigation planned, proposed spending for safety mitigation activities, and efficiency of risk mitigation funding are to be reviewed in the TY2019 GRC applications. The reasonableness of spending decisions must be supported in the record of the TY2019 GRCs. Recommended improvements to the RAMP process by SED and intervenors should be taken into account and addressed in SDG&E's and SoCalGas' next RAMP filing while issues that are applicable to be addressed in the TY2019 GRC applications shall be addressed in those proceedings.

During the joint-PHC for the TY2019 GRCs held on January 10, 2018, there was discussion on whether to consolidate the RAMP proceedings with the TY2019 GRC proceedings. SDG&E and SoCalGas Gas opined that there are no further issues to be addressed in the RAMP proceedings and that the RAMP process has been completed. Parties that are parties to both the RAMP and the GRC proceedings that were present did not object to SDG&E's and SoCalGas' assertion that the RAMP process is complete and that the proceedings should be

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<sup>13</sup> SDG&E and SoCalGas Motion to Close Proceeding at 5.

closed.<sup>14</sup> TURN later on filed a response objecting to SDG&E's and SoCalGas' motion to close the proceedings. TURN argues that RAMP-related issues may still arise in relation to the GRC and that it would make more sense to keep these proceedings open. TURN adds that in the event that the Commission decides to close the RAMP proceedings, intervenors may carry forward to the TY2019 GRC proceedings any hours and costs incurred during the RAMP proceedings and then file a single request for intervenor compensation at the conclusion of the TY2019 GRC proceedings.

We disagree with TURN and reiterate that the final step of integrating findings in the RAMP proceedings into the TY2019 GRC testimony has been completed and RAMP-related requests in the TY2019 GRCs will be reviewed in the GRC applications. There is also little value in keeping the RAMP proceedings open in the event that something arises in the TY2019 GRC proceedings as any such issue can be dealt with in those proceedings. We do agree with TURN however, that intervenors in the RAMP proceedings should be allowed to carry forward to the TY2019 GRC proceedings hours and costs incurred during the RAMP proceedings and make a single request for compensation if they choose to do so. The two proceedings are very closely related and it may be difficult in some instances to determine precisely in which particular proceeding hours and costs were actually spent. Allowing a single filing also benefits the Commission in that it will only have to conduct a single review.

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<sup>14</sup> See transcript of January 10, 2018 Joint PHC for A.17-10-007 and A.17-10-008 at 35-37.

## **6. Conclusion**

Under the procedures adopted in D.14-12-025 and D.16-08-018, SDG&E and SoCalGas were required to file their RAMP submissions into these proceedings which SED reviewed for consistency and compliance. Parties were given the opportunity to comment on SDG&E's and SoCalGas' RAMP submissions as well as SED's review thereof. The RAMP filings and comment process then formed the basis of SDG&E's and SoCalGas' assessment of their safety risks in their next respective GRC filings.

SDG&E and SoCalGas filed their RAMP Report which SED reviewed. Based on our review, as well as SED's analysis of the RAMP Report, we find that the report includes the information required by D.14-12-025 and D.16-08-01. Various parties filed comments to both the RAMP and SED Reports and separate workshops were held to discuss the RAMP Report and the SED Report. As discussed in Section 4 of this decision, SDG&E and SoCalGas incorporated RAMP results into their respective TY2019 GRC applications. Testimony included in the TY2019 GRC applications contains sections pertaining to RAMP. There is also GRC testimony providing an assessment of feedback from the RAMP process.

Based on the above we find that the requirements set forth D.14-12-025 and D.16-08-018 have been satisfied and that the RAMP process has been completed for the TY2019 GRC cycle. Proposed spending for safety mitigation activities and the efficiency of risk mitigation funding are to be reviewed in the TY2019 GRC applications while recommended improvements to the RAMP process should be addressed in the next RAMP filing or if applicable, in the ongoing S-MAP proceeding.

We also find that the RAMP process had positive impacts on SDG&E's and SoCalGas' risk management procedures. Key safety risks and proposed mitigation activities were more thoroughly reviewed, assessed, and analyzed. The RAMP process brings safety to the forefront and potential mitigations and proposed spending to further reduce risk to the public, employees, and because of the RAMP process, safety can be more thoroughly reviewed in the GRC applications. SDG&E and SoCalGas also benefitted from suggested improvements, as well as criticisms from SED and intervenors, and further enhancements to the RAMP process can be taken into account and addressed in future RAMP filings or in SDG&E's SoCalGas' TY2019 GRC applications.

#### **7. Motion to Close Proceedings**

SDG&E and SoCalGas filed a motion to close the proceedings on March 5, 2018 stating that the RAMP process is complete. We agree with SDG&E and SoCalGas and grant the motion. As discussed in the preceding sections of this decision, we find that the final step in the RAMP process was completed upon integration of the RAMP filing and comments into SDG&E's and SoCalGas' TY2019 GRC applications, specifically, in the assessment of safety risks and proposed mitigations. We also addressed TURN's objection to the motion in Section 5 of this decision and no other party filed any objection to the motion.

#### **8. Categorization and Need for Hearing**

The OIIs have been preliminarily categorized as ratesetting and hearings were not contemplated. We affirm that the category for these proceedings is ratesetting. With respect to the need for hearings, we find that there are no contested issues of material fact requiring evidentiary hearings and we affirm that hearings are not necessary.

## **9. Waiver of Comment Period**

This is an uncontested<sup>15</sup> matter in which the decision grants the relief requested.<sup>16</sup> Accordingly, pursuant to Section 311(g)(2) of the Public Utilities Code and Rule 14.6(c)(2), the otherwise applicable 30-day period for public review and comment is waived.

## **10. Assignment of Proceeding**

Commissioner Clifford R. Rechtschaffen is the assigned Commissioner and Rafael Lirag is the assigned ALJ in these proceedings.

### **Findings of Fact**

1. The OIIs were preliminarily categorized as ratesetting and hearings were not contemplated.
2. There are no issues of material fact in contention.
3. Pursuant to and in compliance with the procedures adopted in D.14-12-025 and D.16-08-018, SDG&E and SoCalGas filed the RAMP Report, which SED reviewed for consistency and compliance.
4. The RAMP Report provides a baseline assessment of safety risks to the public, SDG&E's and SoCalGas' employees and systems, and what potential mitigation measures were considered.
5. Parties were given the opportunity to provide comments and various intervenors filed comments to both the RAMP Report and the SED Report.
6. The final step in the RAMP process is to integrate the RAMP filing and comments from SED and intervenors in the TY2019 GRC applications.

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<sup>15</sup> The filing of comments by parties providing criticism and suggestions on how to improve the RAMP Report is part of the RAMP process and does not make the matter contested.

<sup>16</sup> The relief requested is to close the proceedings once the RAMP process is completed.



7. SDG&E's and SoCalGas' TY2019 GRC applications include testimony from witnesses sponsoring RAMP-related activities and testimony assessing feedback from the RAMP process.

8. The SED Report and comments from intervenors include criticisms to the RAMP Report and suggestions to improve the RAMP process.

9. Requests in SDG&E's TY2019 GRC relating to fire hardening inspection and repair programs should be reviewed in the GRC proceeding.

### **Conclusions of Law**

1. The final category for these proceedings should be ratesetting and hearings are not necessary.

2. The procedures adopted in D.14-12-025 and D.16-08-018 regarding SDG&E's and SoCalGas' RAMP filings have been complied with and the RAMP process is now complete.

3. No further action in these proceedings is required.

4. The RAMP proceedings should be closed.

5. Recommended improvements to the RAMP process should be taken into account and addressed in SDG&E's and SoCalGas' next RAMP filing.

Suggestions that are applicable to be addressed in the TY2019 GRC proceedings should be addressed in those proceedings.

**O R D E R**

**IT IS ORDERED** that:

1. The category for Investigations 16-00-015 and 16-10-016 is ratesetting and hearings are not necessary.
2. San Diego Gas & Electric Company and Southern California Gas Company shall address and consider in their next Risk Assessment Mitigation Phase (RAMP) filing, comments and suggestions for improvements to the RAMP process by the Safety and Enforcement Division and by intervenors.
3. The motion to close the proceedings is granted.
4. Intervenors in these proceedings may choose to carry forward to Applications 16-10-007 and 16-10-008, any hours and costs incurred in these proceedings and then file a single request for intervenor compensation at the conclusion of Applications 16-10-007 and 16-10-008.
5. Investigation 16-10-015 and Investigation 16-10-016 are closed.

This order is effective today.

Dated April 26, 2018, at San Francisco, California.

MICHAEL PICKER  
President  
CARLA J. PETERMAN  
LIANE M. RANDOLPH  
MARTHA GUZMAN ACEVES  
CLIFFORD RECHTSCHAFFEN  
Commissioners

## **APPENDIX A**

A.17-10-007/-008, Appendix A.1 and A.2 from revised direct testimony of Diana Day (Exhibit SCG-02-R/SDG&E-02-R, Chapter 1), showing tabular maps of RAMP-related testimony in SoCalGas and SDG&E GRC testimony chapters exhibits.

## **APPENDIX A.1**

### **Mapping of RAMP Risks in the TY 2019 GRC**

## APPENDIX A.1

### Mapping of RAMP Risks in the TY 2019 GRC

#### SoCalGas O&M

RAMP Report Chapter Number	RAMP Risk	GRC Witness	GRC Testimony Exhibit Number
SCG-01	Catastrophic Damage Involving Third Party Dig-Ins	Gina Orozco-Mejia	SCG-04
		Omar Rivera	SCG-05
SCG-02	Employee, Contractor, Customer, and Public Safety	Andrew Cheung	SCG-20
		Carmen Herrera	SCG-23
		Darrell Johnson	SCG-25
		Devin Zornizer	SCG-13
		Gina Orozco-Mejia	SCG-04
		Gwen Marelli	SCG-18
		Mary Gevorkian	SCG-32
		Michael Baldwin	SCG-19
		Omar Rivera	SCG-05
Rene Garcia	SCG-17		
SCG-03	Cyber Security	Gavin Worden	SCG-27
SCG-04	Catastrophic Damage Involving High-Pressure Gas Pipeline Failure	Devin Zornizer	SCG-13
		Elizabeth Musich	SCG-06
		Gina Orozco-Mejia	SCG-04
		Maria Martinez	SCG-14
		Neil Navin	SCG-10
		Omar Rivera	SCG-05
		Richard Phillips	SCG-15
SCG-05	Workplace Violence	Carmen Herrera	SCG-23
		Mia DeMontigny	SCG-26
SCG-06	Physical Security of Critical Gas Infrastructure	Carmen Herrera	SCG-23
		Neil Navin	SCG-10
SCG-07	Workforce Planning	Gina Orozco-Mejia	SCG-04
		Mary Gevorkian	SCG-32
		Omar Rivera	SCG-05
SCG-08	Records Management	Deanna Haines	SCG-09
		Maria Martinez	SCG-14
		Mia DeMontigny	SCG-26
		Omar Rivera	SCG-05
		Stacey Lee	SCG-33
SCG-09	Climate Change Adaptation	Deanna Haines	SCG-09
SCG-10	Catastrophic Damage Involving Medium-Pressure Gas Pipeline Failure	Gina Orozco-Mejia	SCG-04
		Maria Martinez	SCG-14
		Michael Bermel	SCG-08
		Omar Rivera	SCG-05
SCG-11	Catastrophic Event Related to Storage Well Integrity	Neil Navin	SCG-10

**SoCalGas Capital**

RAMP Report Chapter Number	RAMP Risk	GRC Witness	GRC Testimony Exhibit Number
SCG-01	Catastrophic Damage Involving Third Party Dig-Ins	Gina Orozco-Mejia	SCG-04
SCG-02	Employee, Contractor, Customer, and Public Safety	Christopher Olmsted Gina Orozco-Mejia	SCG-26 SCG-04
SCG-03	Cyber Security	Gavin Worden	SCG-27
SCG-04	Catastrophic Damage Involving High-Pressure Gas Pipeline Failure	Deanna Haines Michael Bermel & Elizabeth Musich Gina Orozco-Mejia Maria Martinez Richard Phillips	SCG-09 SCG-07 SCG-04 SCG-14 SCG-15
SCG-05	Workplace Violence	Carmen Herrera	SCG-23
SCG-06	Physical Security of Critical Gas Infrastructure	Michael Bermel & Elizabeth Musich	SCG-07
SCG-08	Records Management	Christopher Olmsted Maria Martinez	SCG-26 SCG-14
SCG-09	Climate Change Adaptation	Michael Bermel & Elizabeth Musich Neil Navin	SCG-07 SCG-10
SCG-10	Catastrophic Damage Involving Medium-Pressure Gas Pipeline Failure	Gina Orozco-Mejia Maria Martinez Michael Bermel	SCG-04 SCG-14 SCG-08
SCG-11	Catastrophic Event Related to Storage Well Integrity	Neil Navin	SCG-10

**SDG&E O&M**

<b>RAMP Report Chapter Number</b>	<b>RAMP Risk</b>	<b>GRC Witness</b>	<b>GRC Testimony Exhibit Number</b>
SDG&E-01	Wildfires Caused by SDG&E Equipment (Including Third Party Pole Attachments)	William Speer	SDG&E-15
SDG&E-02	Catastrophic Damage Involving Third Party Dig-Ins	Deanna Haines Gina Orozco-Mejia Omar Rivera	SDG&E-09 SDG&E-04 SDG&E-05
SDG&E-03	Employee, Contractor and Public Safety	Gina Orozco-Mejia Gwen Marelli Jerry Stewart Lisa Davidson Omar Rivera R. Dale Tattersall Tashonda Taylor William Speer	SDG&E-04 SDG&E-17 SDG&E-18 SDG&E-19 SDG&E-05 SDG&E-22 SDG&E-30 SDG&E-15
SDG&E-04	Distributed Energy Resources – Safety and Operational Concerns	William Speer	SDG&E-15
SDG&E-06	Fail to Blackstart	Daniel Baerman William Speer	SDG&E-16 SDG&E-15
SDG&E-07	Cyber Security	Gavin Worden	SDG&E-25
SDG&E-08	Aviation Incident	William Speer	SDG&E-15
SDG&E-09	Workplace Violence	Mia DeMontigny R. Dale Tattersall	SDG&E-26 SDG&E-22
SDG&E-10	Catastrophic Damage Involving High-Pressure Gas Pipeline Failure	Elizabeth Musich Maria Martinez	SDG&E-06 SDG&E-11
SDG&E-11	Unmanned Aircraft System Incident	William Speer	SDG&E-15
SDG&E-12	Electric Infrastructure Integrity	William Speer	SDG&E-15
SDG&E-13	Records Management	Deanna Haines Mia DeMontigny Omar Rivera Sandra Hrna William Speer	SDG&E-09 SDG&E-26 SDG&E-05 SDG&E-31 SDG&E-15
SDG&E-14	Climate Change Adaptation	William Speer	SDG&E-15
SDG&E-15	Public Safety Events - Electric	R. Dale Tattersall William Speer	SDG&E-22 SDG&E-15
SDG&E-16	Catastrophic Damage Involving Medium-Pressure Gas Pipeline Failure	Gina Orozco-Mejia Maria Martinez	SDG&E-04 SDG&E-11
SDG&E-17	Workforce Planning	Gina Orozco-Mejia Jerry Stewart Tashonda Taylor William Speer	SDG&E-04 SDG&E-18 SDG&E-30 SDG&E-15

**SDG&E Capital**

RAMP Report Chapter Number	RAMP Risk	GRC Witness	GRC Testimony Exhibit Number
SDG&E-01	Wildfires Caused by SDG&E Equipment (Including Third Party Pole Attachments)	Alan Colton	SDG&E-14
SDG&E-02	Catastrophic Damage Involving Third Party Dig-Ins	Gina Orozco-Mejia	SDG&E-04
SDG&E-03	Employee, Contractor, and Public Safety	Alan Colton Gina Orozco-Mejia R. Dale Tattersall	SDG&E-14 SDG&E-04 SDG&E-22
SDG&E-04	Distributed Energy Resources – Safety and Operational Concerns	Alan Colton	SDG&E-14
SDG&E-05	Major Disturbance to Electrical Service (e.g., Blackout)	R. Dale Tattersall	SDG&E-22
SDG&E-06	Fail to Blackstart	Daniel Baerman R. Dale Tattersall	SDG&E-16 SDG&E-22
SDG&E-07	Cyber Security	Gavin Worden	SDG&E-25
SDG&E-08	Aviation Incident	Alan Colton	SDG&E-14
SDG&E-09	Workplace Violence	R. Dale Tattersall	SDG&E-22
SDG&E-10	Catastrophic Damage Involving High-Pressure Gas Pipeline Failure	Michael Bermel & Elizabeth Musich Maria Martinez	SDG&E-07 SDG&E-11
SDG&E-12	Electric Infrastructure Integrity	Alan Colton	SDG&E-14
SDG&E-13	Records Management	Christopher Olmsted	SDG&E-24
SDG&E-16	Catastrophic Damage Involving Medium-Pressure Gas Pipeline Failure	Gina Orozco-Mejia Maria Martinez	SDG&E-04 SDG&E-11



**APPENDIX A.2**

**Mapping of GRC Witnesses Sponsoring RAMP Costs in the TY 2019 GRC**

## APPENDIX A.2

## Mapping of GRC Witnesses Sponsoring RAMP Costs in the TY 2019 GRC

SoCalGas O&M

GRC Witness Area	GRC Witness Name	Exhibit Number	2016 Embedded Base Costs (000s)	TY 2019 Estimated Incremental (000s)	Total
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	Stacey Lee	SCG-33	665	200	865
ADVANCED METERING	Rene Garcia	SCG-17	0	456	456
CORPORATE CENTER - GENERAL ADMINISTRATION	Mia DeMontigny	SCG-28	444	304	748
CS - FIELD & METER READING	Gwen Marelli	SCG-18	48,102	9,350	57,452
CS - INFORMATION	Andrew Cheung	SCG-20	1,489	1,237	2,726
CS - OFFICE OPERATIONS	Michael Baldwin	SCG-19	1,057	1,474	2,531
CYBER SECURITY	Gavin Worden	SCG-27	239	470	709
ENVIRONMENTAL	Darrell Johnson	SCG-25	2,582	0	2,582
FLEET & FACILITIES	Carmen Herrera	SCG-23	0	1,232	1,232
GAS CONTROL & SYSTEM OPERATIONS/PLANNING	Devin Zornizer	SCG-13	3,122	2,586	5,708
GAS DISTRIBUTION	Gina Orozco-Mejia	SCG-04	50,481	11,526	62,007
GAS ENGINEERING	Deanna Haines	SCG-09	5,672	1,812	7,484
GAS MAJOR PROJECTS	Michael Bermel	SCG-08	0	1,398	1,398
GAS SYSTEM INTEGRITY	Omar Rivera	SCG-05	7,840	14,913	22,753
GAS TRANSMISSION	Elizabeth Musich	SCG-06	6,923	17,000	23,923
HR, DISABILITY, WORKERS COMP & SAFETY	Mary Gevorkian	SCG-32	7,174	7,292	14,466
PIPELINE SAFETY ENHANCEMENT PLAN	Richard Phillips	SCG-15	0	83,156	83,156
TIMP & DIMP	Maria Martinez	SCG-14	77,683	8,317	86,000
UNDERGROUND STORAGE	Neil Navin	SCG-10	20,086	7,546	27,632
<b>Total O&amp;M - SCG</b>			<b>233,559</b>	<b>170,269</b>	<b>403,828</b>

**SoCalGas Capital**

GRC Witness Area	GRC Witness Name	Exhibit Number	2017 Estimated RAMP Total (000s)	2018 Estimated RAMP Total (000s)	2019 Estimated RAMP Total (000s)
CYBER SECURITY	Gavin Worden	SCG-27	17,844	19,476	22,731
FLEET SERVICES & FACILITY OPERATIONS	Carmen Herrera	SCG-23	0	600	600
GAS DISTRIBUTION	Gina Orozco-Mejia	SCG-04	14,074	13,498	10,682
GAS ENGINEERING	Deanna Haines	SCG-09	2,245	2,245	2,245
GAS MAJOR PROJECTS	Michael Bermel	SCG-08	400	3,156	25,901
GAS TRANSMISSION	Michael Bermel & Elizabeth Musich	SCG-07	8,735	15,951	11,509
INFORMATION TECHNOLOGY	Christopher Olmsted	SCG-26	34,970	40,082	36,315
PIPELINE SAFETY ENHANCEMENT PLAN	Richard Phillips	SCG-15	5,587	8,867	89,927
TIMP & DIMP	Maria Martinez	SCG-14	125,184	125,184	215,000
UNDERGROUND STORAGE	Neil Navin	SCG-10	144,270	131,995	113,601
<b>Total Capital - SCG</b>			<b>353,309</b>	<b>361,054</b>	<b>528,511</b>

**SDG&E O&M**

GRC Witness Area	GRC Witness Name	Exhibit Number	2016 Embedded Base Costs (000s)	TY 2019 Estimated Incremental (000s)	Total
ACCOUNTING AND FINANCE, LEGAL, REG AFFAIRS AND EXTERNAL AFFAIRS	Sandra Hrna	SDG&E-31	591	200	791
CORPORATE CENTER - GENERAL ADMINISTRATION	Mia DeMontigny	SDG&E-26	252	195	447
CS - FIELD	Gwen Marelli	SDG&E-17	4,570	277	4,847
CS - INFORMATION & TECHNOLOGIES	Lisa Davidson	SDG&E-19	693	241	934
CS - OFFICE OPERATIONS	Jerry Stewart	SDG&E-18	705	237	942
CYBER SECURITY	Gavin Worden	SDG&E-25	4,198	3,740	7,938
ELECTRIC DISTRIBUTION	William Speer	SDG&E-15	71,930	31,105	103,035
ELECTRIC GENERATION & SONGS	Daniel Baerman	SDG&E-16	20	20	40
GAS DISTRIBUTION	Gina Orozco-Mejia	SDG&E-04	13,519	1,096	14,615
GAS SYSTEM INTEGRITY	Omar Rivera	SDG&E-05	125	1,227	1,352
GAS TRANSMISSION	Elizabeth Musich	SDG&E-06	194	0	194
HR, DISABILITY, WORKERS COMP & SAFETY	Tashonda Taylor	SDG&E-30	5,112	1,055	6,167
REAL ESTATE & FACILITIES	R. Dale Tattersall	SDG&E-22	2,643	931	3,574
TIMP & DIMP	Maria Martinez	SDG&E-11	7,744	3,256	11,000
<b>Total O&amp;M - SDG&amp;E</b>			<b>112,296</b>	<b>43,580</b>	<b>155,876</b>

**SDG&E Capital**

GRC Witness Area	GRC Witness Name	Exhibit Number	2017 Estimated RAMP Total (000s)	2018 Estimated RAMP Total (000s)	2019 Estimated RAMP Total (000s)
CYBER SECURITY	Gavin Worden	SDG&E-25	6,146	7,232	5,618
ELECTRIC DISTRIBUTION	Alan Colton	SDG&E-14	180,566	269,078	341,438
REAL ESTATE, LAND SERVICES AND FACILITIES	R. Dale Tattersall	SDG&E-22	10,208	16,037	6,193
GAS DISTRIBUTION	Gina Orozco-Mejia	SDG&E-04	14,037	51,466	71,521
GAS TRANSMISSION	Michael Bermel & Elizabeth Musich	SDG&E-07	1,689	1,689	1,689
INFORMATION TECHNOLOGY	Christopher Olmsted	SDG&E-24	20,422	26,129	21,657
ELECTRIC GENERATION & SONGS	Daniel Baerman	SDG&E-16	300	806	0
TIMP & DIMP	Maria Martinez	SDG&E-11	24,216	24,216	49,000
<b>Total Capital - SDG&amp;E</b>			<b>257,584</b>	<b>396,653</b>	<b>497,116</b>

DD-A.2-3

(End of Appendix A)