

SED DATA REQUEST - 1
SDG&E-SOCALGAS RAMP – I.16-10-015_016
SDG&E & SOCALGAS RESPONSE
DATE RECEIVED: DECEMBER 19, 2016
DATE RESPONDED: JANUARY 10, 2017

1. For each Chapter describing the top safety risks for SDG&E and SoCal Gas that contained individual tables for their Risk Mitigation Plan with columns for: ID, Control, Risk Drivers Addressed, Capital, O&M, Control Total, and GRC Total - as noted in the following example.



Table 3: Baseline Risk Mitigation Plan¹³
 (Direct 2015 \$000)¹⁴

ID	Control	Risk Drivers Addressed	Capital ¹⁵	O&M	Control Total ¹⁶	GRC Total ¹⁷
1	Policy, procedures, standards, and ESCMP ⁸	<ul style="list-style-type: none"> Deviation from policies or procedures, or other legal, regulatory, or safety requirements Workplace hazards posed to employees Gas hazards are not identified or untimely response to identified gas hazards Effective corrective actions to prevent a reoccurrence are not instituted 	n/a	\$5,300	\$5,300	\$5,300

Please provide a consolidated Table that lists for each utility:

Company Risk ID (Chapter)	Control	Capital	O&M	Control Total	Estimated Mitigation O&M	Estimate Mitigation Capital	GRC Total	Delta

- This table does not need to include the risk drivers.
- To the extent possible, please mark or identify Controls/Mitigations for which the mitigation spending overlaps or is duplicative of spending for other Controls/Mitigations.

SDG&E Response 01:

The excel spreadsheet “SED DR-01_Q1.xlsx” contains the requested consolidated tables by utility with clarifying modifications to the column headers. These modifications were agreed upon during a telephone conversation among representatives from SED and SoCalGas/SDG&E on December 19, 2016.

Please note that Control refers to baseline activities (i.e., activities in place in 2015) and Mitigation refers to proposed activities (i.e., estimated activities in place in 2017, 2018 and/or

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2019). The consolidated tables include baseline capital costs and forecasted capital cost ranges by year (2015, 2017, 2018 and 2019). As indicated in the RAMP Report, SoCalGas and SDG&E provided the capital baseline costs associated with the current controls pursuant to Decision (D.) 14-12-025 and D.16-08-018. The 2015 capital amounts are for illustrative purposes only because capital projects generally span several years. Therefore, considering only one year of capital may not represent the entire mitigation. 2017 and 2018 capital amounts were also provided in the consolidated tables for informational purposes; 2019 (also referred to as the Test Year) amounts for O&M and capital were used to populate the Mitigation Total, as requested. The Mitigation Total is comprised of both GRC-jurisdictional and non-GRC figures, consistent with the SoCalGas/SDG&E RAMP Report. However, unlike the RAMP Report, the Mitigation Total column in the consolidated tables was calculated using the summation of the 2019 O&M and 2019 Capital amounts, as requested from SED for this data request. The Mitigation Total column provided in the RAMP Report is the summation of the 2019 O&M and the 2017-2019 Capital (a three-year total) amounts. SoCalGas and SDG&E presented the Mitigation Total as a three-year capital and one year O&M sum in the RAMP Report because, again, capital projects generally span several years. Accordingly, considering only one year of capital may not accurately represent the entire mitigation. Further, the consolidated tables generated for this data request include a Delta column, which is the difference between the Mitigation Total (2019 O&M plus 2019 Capital) and the Control Total (2015 O&M plus 2015 Capital). This Delta column is being provided pursuant to SED's request; however, comparing one year of capital with another year of capital is not an accurate representation of a mitigation.

Lastly, SoCalGas and SDG&E note the following with respect to the consolidated tables:

- The numbers presented in the RAMP Report's risk chapters may differ due to rounding.
- The purpose of RAMP is not to request funding. Any funding requests will be made in the GRC. The forecasts for mitigations are not for funding purposes, but are rather to provide a range for the future GRC filing. This range will be refined with supporting testimony in the GRC.
- Controls/Mitigations for which the mitigation spending overlaps or is duplicative of spending for other Controls/Mitigations has been identified.
- Any calculation errors that were identified after the submission of the RAMP Report have been corrected in the consolidated tables and explicitly identified.
- Delta calculated as the average of Low and High for the Mitigation Total minus the Control Total.
- The Notes columns provide the non-GRC amounts. Non-GRC Control represents Baseline (2015) costs. Non-GRC Mitigation represents Proposed cost ranges for 2017-2019 Capital and 2019 O&M.
- A legend of the RAMP risk chapters is provided for your convenience following the consolidated tables.

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2. Please provide the current plan for FiRM (associated with mitigating wildfire risk for SDG&E) with revised/updated information on project phasing for the period covered by Sempra's 2016 GRC decision.

Please explain how proposed mitigations in RAMP would expand/accelerate or otherwise enhance the FiRM currently in effect.

SDG&E Response 02:

SDG&E's current plan for the FiRM program is to continue implementing fire-hardening (namely, wood-to-steel pole conversion and replacement of small copper conductor with stronger aluminum conductor) in the Fire Threat Zone. SDG&E assets with the highest fire risk are prioritized for fire-hardening.

In the direct testimony of John Jenkins, SDG&E's Electric Distribution Capital witness, in Application (A.) 14-11-003 which was approved in Decision (D.) 16-06-054, SDG&E explained "FiRM is aggressively addressing fire risk by hardening critical areas by replacing antiquated line elements, utilizing advanced technology, and safeguarding facilities from known local weather conditions. FiRM is being broken into multiple phases, with the scope of work varying within each phase" (SDGE-09 at p. JDJ-123 lines 20-23). The phases, as presented in A.14-11-003, were location-based with work planned through 2018. Mr. Jenkins also discussed the Reliability Improvements in Rural Areas Team (RIRAT), which is a multi-disciplinary technical team of subject matter experts within SDG&E that "focuses its attention on facilities and activities in these areas so as to assure that all prudent and cost-effective fire-prevention measures are promptly evaluated and implemented" (SDGE-09 at p. JDJ-7 lines 11-13). Today, SDG&E no longer utilizes a phased approach for FiRM. Rather, SDG&E prioritizes FiRM work based on information from the RIRAT and a probabilistic model, the Wildfire Risk Reduction Model (WRRM). These "smarter" tools provide more granular information, as compared to location-based phasing, and allow SDG&E to replace its high risk assets (i.e., those that are likely more prone to failure and ignition) first. It should also be noted that D.16-06-054 (SDG&E's 2016 GRC Decision) did not dictate specific projects for FiRM (or pole replacement counts, or conductor miles to be replaced); rather it outlined phases.

In the RAMP, SDG&E has proposed to continue the overall FiRM effort beyond 2018 so that SDG&E's system will be further hardened to withstand ignitions and thus reduces the overall fire exposure. The proposed mitigations included in RAMP will expand the current program to include a larger amount of fire-hardening than authorized in the 2016 GRC Decision.

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3. The SoCal Gas RAMP includes Physical Security of Critical Gas Infrastructure as a Risk. Please provide an explanation of why Physical Security of Electric (Transmission and/or Distribution) facilities was not identified as a Risk for this RAMP.

SDG&E Response 03:

Using SDG&E's 7X7 matrix, only risks which scored a 4 or greater¹ for the Health, Safety, and Environmental impact area within the SDG&E 2015 Risk Registry were included in the RAMP Report. The SDG&E risk of Physical Security of Critical Electric Infrastructure was scored a 3² in 2015. The conservative score of a 3 in the Health, Safety, and Environmental impact area was given using a reasonable worst case scenario, which considered a case study of the Eastern earthquake in Imperial Valley that disrupted operations at the Imperial Valley Substation. Please note that the scores are based on this reasonable worst case scenario; they do not address all consequences that can happen if the risk occurs. It should also be noted that the score of 3 reflects the risk remaining after existing controls are in place.

Considering the reasonable worst case scenario, even with this major disruption to the substation, there was likely not a Health/Safety concern that would warrant a score of 4. However, a different reasonable worst case scenario could result in different scores. Further, SDG&E has taken a proactive approach to mitigating and managing the risk of Physical Security of Critical Electric Infrastructure which was also supports the conservative score of 3.

In addition, a majority of the mitigations for the Physical Security of Critical Electric Infrastructure risk are related to Physical Security. Such mitigation activities include physical security systems and contract security for both manned and unmanned SDG&E locations as well as the Critical Asset Security Team (CAST). These controls were included in the RAMP risk of Public Safety Events – Electric. Accordingly, while the risk of Physical Security of Critical Electric Infrastructure was not included in the RAMP, the primary mitigation activities were presented in SDG&E's RAMP Report.

¹ Major - Permanent/Serious injuries or illnesses: Few serious injuries or illnesses to the public or employees, significant and short-term impacts to the environment.

² Moderate – Minor injuries or illnesses: Minor injuries or illnesses to many public members or employees, Moderate and short-term impacts to the environment.