CFC-SEU DATA REQUEST-005
SOCALGAS- SDG&E 2019 GRC – A.17-11-007/8
SEU RESPONSE
DATE RECEIVED: FEBRUARY 14, 2018
DATE RESPONDED: MARCH 1, 2018

Exhibit Reference: SDG&E-33, SCG -15
SDG&E Witness: Gentes, Phillips
Subject: Define critical customer, RAMP, RSE's

1. SDGE-33, page RCG-3, describes the Capital Planning Process:
"The capital requirements identified by the FCCs are provided to the Capital Planning Committee (CPC), a cross-functional team of directors representing each operational area with capital requests. The CPC reviews the FCC submissions, cross-prioritizes projects among the FCCs, and establishes a final ranking of proposed capital work. Projects determined to have the highest ratings on key priority metrics will receive the highest priority for funding. These key priority metrics include: safety, cost effectiveness, reliability, security, environmental, and customer experience."

a. What units are the key priority metrics reported in? Please explain, for each listed metric..

b. Aside from those listed, what addtional metrics (if any) are commonly used? Please comment, and include the units applicable to those other metrics.

SDG&E Response 1:

a. Exhibit SDG&E-33-R provides a general overview and description of SDG&E's Capital Planning Process. For details regarding SDG&E's capital planning committee meetings or information regarding projects' priority metrics, please refer to the testimony of the SDG&E capital project witnesses.

   Please note that how the cost effectiveness metric (*i.e.*, risk spend efficiency) is calculated is currently an open item being addressed in Phase 2 of the Safety Model Assessment Proceeding (Application 15-05-002 (consolidated)).

b. Please see the response to Question 1(a) above.

2. SDG&E-33, page RCG-4, discusses how the risk evaluation process affects the capital planning process:

"Similar to SDG&E's risk evaluation processes,4 the capital planning process continues to evolve as SDG&E endeavors to achieve its and the Commission's shared goal of determining the risk reduction per dollar invested. SDG&E, together with Southern California Gas Company (SoCalGas), demonstrate the first steps towards this evolution by showcasing a pilot they are currently conducting to calculate a risk spend efficiency for their proposed risk mitigations."

The associated Footnote #5 cites the Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company, November 30, 2016 (RAMP Report).

Page A-1 of the RAMP-A Report observes that...

"In many risks, safety and reliability are inherently related and cannot be separated, and the mitigations reflect that fact."

> a. In Sempra's view, is it than possible to definitively say that any safety expenditures that also beneficially impact reliability should, from a cost causation perspective, be strictly attributed to safety benefits? Please comment

SDG&E Response 2:

Exhibit SDG&E-33-R (at page RCG-4 through RCG-5) provides a high-level overview/reference to the Risk Assessment and Mitigation Phase (RAMP) and risk spend efficiency (RSE). For details regarding RAMP and RSEs, please refer to Exhibit SCG-02-R/SDG&E-02-R.

There are some reliability-related risks and/or mitigations that have a secondary impact on safety. For example, a significant loss of service on the electric grid (*e.g.*, blackout) is primarily a reliability issue/risk. However, if a large-scale blackout were to occur, there could be an increase in safety considerations, such as traffic accidents, as a result of the blackout. Conversely, there are times in which a reliability decision have a negative impact or adversely affect safety. While SDG&E and SoCalGas recognize that there are interdependencies between safety and reliability, SDG&E and SoCalGas do not characterize benefits as specific to an attribute.

3. SDG&E-33, page RCG-4, footnote #5 cites the Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company, November 30, 2016 (RAMP Report).

Page 38 of Commission Decision D.14-12-025 describes the purpose of RAMP filings:

"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. The utility's RAMP submission shall contain the information that the Refined Straw Proposal has described, as summarized above."

Page 32 of D.14-12-025 describes the recommended content of utility risk mitigation plans:

"The utility's risk mitigation plan, including an explanation of how the plan takes into account: Utility financial constraints; Execution Feasibility; Affordability Impacts; Any other constraints identified by the utility."

> a. How are the affordability impacts identified in RAMP reflected in the GRC application? Please explain, and cite specific sections of the application exhibits addressing affordability impacts.

SDG&E Response 3:

Exhibit SDG&E-33-R (at page RCG-4 through RCG-5) provides a high-level overview/reference to the RAMP and RSEs. For details regarding RAMP and RSEs, please refer to Exhibit SCG-02-R/SDG&E-02-R.

SDG&E and SoCalGas were thoughtful when developing mitigation plans as presented in the RAMP and considered constaints, including affordability, when doing so. SoCalGas and SDG&E then integrated the RAMP mitigations into the GRC, as described in the Direct Testimony of Jamie York (Exhibit SCG-02-R/SDG&E-02-R, Chapter 3).

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4. SDG&E-33, page RCG-4, footnote #5 cites the Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company, November 30, 2016 (RAMP Report).

Page A-6 of the RAMP Report describes the risk management activities cost estimation process:

"...in order to determine expenditures, whether capital or O&M, SoCalGas' and SDG&E's financial planners and ERM team applied a variety of approaches to identify costs. Generally, the planners and ERM team used the following process: 1. Considered each control or mitigation effort in light of current or planned operations. 2. Selected a methodology to estimate the cost impact of adopting the mitigation strategy (expressed in terms of 2015 dollars), whether O&M expense programs or capital projects. That methodology would generally fall into three types: a. Selected a like-kind current activity, and then applied historical costs/expenses; b. Selected a similar proxy activity, and then applied historical costs and adjusted as required; or c. Developed a zero-based cost estimate for the
mitigation activity. 3. Developed a range estimate considering the likelihood of variations in scope, schedule and resource availability."

> a. Please describe the historical accuracy of the cost estimates for projects similar in nature to those that are likely to be executed under RAMP in future years. In particular, what was the average variance, and what was the observed range of variation?

SDG&E Response 4:

Exhibit SDG&E-33-R (at page RCG-4 through RCG-5) provides a high-level overview/reference to the RAMP and RSEs. For details regarding RAMP and RSEs, please refer to Exhibit SCG-02-R/SDG&E-02-R.

SDG&E objects to this request as vague and ambiguous and subject to misinterpretation. Subject to and without waiving this objection, SDG&E responds as follows. SDG&E interprets this question to be referring to the accuracy of forecasted costs to recorded costs. Accuracy of cost estimates have not been completed at this time. SDG&E and SoCalGas anticipate the accuracy of cost estimates to be completed in the context of the Spending Accountability Report adopted by the Commission in Decision (D.)14-12-025. SDG&E anticipates beginning to produce this report in 2020 for the 2019 Test Year.

5. SDG&E-33, page RCG-4, footnote #5 cites the Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company, November 30, 2016 (RAMP Report).

Page A-7 of the RAMP Report describes the Risk Spend Efficiency ratio:

"SDG&E and SoCalGas define Risk Spend Efficiency (RSE) as a ratio developed to quantify and compare the estimated effectiveness of a mitigation at reducing risk to other mitigations for the same risk, or 'risk reduction per dollar spent,' as D.16-08-018 requires." The associated footnote says that "D.14-12-025 also refers to this as 'estimated mitigation costs in relation to risk mitigation benefits."

> a. Does RSE incoprorate any value of lost life or value of life saved, and, if so, what are those valuations?

As pointed out on Page A-1 of the RAMP-A Report, "In many risks, safety and reliability are inherently related and cannot be separated, and the mitigations reflect that fact."

> b. Please explain whether, and if so, how, reliability benefits factor into RSE calculations.

SDG&E Response 5:

Exhibit SDG&E-33-R (at page RCG-4 through RCG-5) provides a high-level overview/reference to the RAMP and RSEs. For details regarding RAMP and RSEs, please refer to Exhibit SCG-02-R/SDG&E-02-R.

a. No, the RSE does not incorporate a valuation of life.

b. The calculation of RSEs was based on the SDG&E and SoCalGas' methodology of assessing risks using the 7x7 risk evaluation framework. As described in Page B-4 of the RAMP Report, risk scores are calculated from two primary inputs: impact and frequency. The frequency reflects the likelihood of the risk event occurring within a certain time. The impact describes the effects or outcomes of a risk event and is assessed in terms of 4 attributes:
   - Safety, Health and Enviromental consequences
   - Operational and Reliability consequences
   - Regulatory, Legal and Compliance consequences; and
   - Financial consequences.

   As described in response to Question 2 above, SDG&E and SoCalGas do not characterize benefits as specific to an attribute. Benefits are rather estimated based on how a given control/mitigation reduces the frequency of a risk event occurring.

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6. SCG-15-WP, describing pipeline safety enhancement projects, makes several allusions to "critical customers." For example, from page 272:

"There are several core and non-core customers both within the replacement segment and upstream of the replacement segment that will be impacted by an outage. Prior to shutting in the line, the customers within the replacement section will be connected and supplied with Compressed Natural Gas (CNG). The remaining upstream customers will continue to be fed by the existing pipe network however, SoCalGas will need to coordinate timing of the temporary shut-in with a critical customer due to the lowered capacity when either the north or south feed is undergoing an outage."

a. Please define "critical customer," per the term's usage in the exhibit.

Utilities Response 6:

All of the references to "critical customer" in the exhibit pertain to the same customer, a United States military facility.

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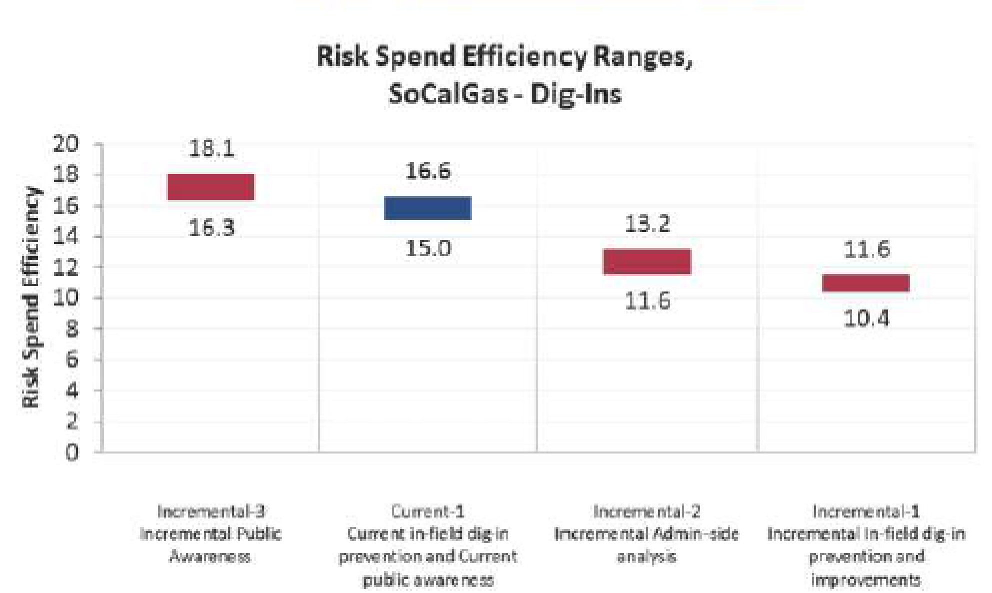
7. SDG&E-33, page RCG-4, footnote #5 cites the Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company, November 30, 2016 (RAMP Report).
Figure 4 of the RAMP-A Report is as follows:

Figure 4: RSEs for SoCalGas Dig-Ins Risk



a. Please show the associated estimated project costs for the four alternatives depicted.

SDG&E Response 7:

Exhibit SDG&E-33-R (at page RCG-4 through RCG-5) provides a high-level overview/reference to the RAMP and RSEs. For details regarding RAMP and RSEs, please refer to Exhibit SCG-02-R/SDG&E-02-R.

The figure provided by CFC in this question is from page SDGE/SCG A-10 of the RAMP Report. The estimated RAMP costs supporting this RAMP figure are provided in the table below. However, please note that the forecasted costs shown in the RAMP Report do not represent GRC cost requests. Rather, the RAMP estimates were superseded by GRC cost requests, as those requests are described in GRC testimony. In other words, the costs shown in the RAMP Report cannot be relied upon as accurately reflecting the Test Year 2019 GRC cost requests, by the nature of the timing of the Commission-determined process. For more information about GRC integration, see the RAMP to GRC Integration testimony of Jamie York (Exhibit SCG-02/SDG&E-02, Chapter 3).

SDG&E Response 7:

Mitigation	Name	Description	Capital Cost (2017-2019)	OM Cost (2017-2019 average)
Current-1	Baseline In-field Dig-in Prevention and Improvements and Baseline Public awareness	• Locate & Mark Training • Locate & Mark Operator Qualification • Staff Support • Locate & Mark • Pipeline Observation • Damage Prevention Public Awareness	$-	($23,243)
Incremental-1	Proposed In-field Dig-in Prevention and Improvements	• Standardize & Upgrade Equipment • Issue Smart Phones • Incremental Locate & Mark Resources	$6,520	$1,622
Incremental-2	Proposed Admin-Side Analysis	• Upgrade Reporting Systems • Incremental Support Staff	$7,300	$865
Incremental-3	Proposed Public Awareness	• Public Awareness	$-	$204

Please note that negative values are used for baseline costs for calculation purposes.