

RAMP Data Transparency Submission

Background

SCE appreciates the opportunity to be the first IOU to “test-drive” the PG&E transparency proposal as outlined in D.21-11-009; SCE provides the results of the testing of the transparency proposal via this data submission, dated July 12, 2022. At page 41, D.21-11-009 declares the following:

“We clarify that by requiring that SCE test and serve the transparency documents we are directing SCE to complete the templates included in the modified PG&E Proposal to the best of its ability. We do not require SCE to use the completed template information to select their mitigation choices. Instead, we will consider the results of SCE’s test drive **as purely informational** regarding the templates’ feasibility and their usefulness in providing transparency for Staff and parties.” (emphasis added)

SCE is prepared to discuss challenges and observations regarding each of the three data tables outlined in the Decision, and explain SCE’s approaches in test-driving the population of these data tables. It is important to understand that, per the Commission guidance cited above, this “test-drive” was generally not an exhaustive process, but conveys general themes and potential “blind-spots” when the PG&E transparency proposal was given to another party (SCE) to test.

Data Table #1: Risk Results

SCE Observations and Feedback:

- SCE assumes that the year column represents the risk value at the **beginning** of that year (and not the end of the year). This was not quite clear in the transparency proposal documentation, and SCE would recommend that this be clarified in the final documentation.
- For purposes of implementation, SCE assumes that the only portfolio of concern is the “Proposed Portfolio.” There are no guidelines on the treatment of alternative portfolios.
- SCE questions whether an “Estimate Quality” is needed when providing the Estimate Quality on “baseline data,” given that Data Table #3 captures the information for both driver and consequence levels. For example, if the Estimate Quality of the driver data is “High” and the Estimate Quality of the consequence data is “Medium,” it is unclear what the Estimate Quality of the baseline data should be.
 - For purposes of this “test-drive,” SCE provided an estimated quality of the baseline “X-Y,” where X represents the Estimate Quality of the driver data and Y represents the Estimate Quality of the consequence data.

- SCE proposes that future iterations contain two tables to clearly delineate what is a “baseline” table vs a “mitigation table.” Having a column named “Mitigation” and where one of the values is “Baseline” is confusing.
- SCE is unclear why the columns “Estimate Quality, Confidence Interval” need to be repeated for each result type (LORE Before, LORE After, Risk Before), as these are outputs of risk mitigation inputs. SCE will determine the “Estimate Quality” of the mitigation effectiveness that drives the risk reduction, and use that value to populate the Risk Before (LoRE/CoRE) /Risk After (LoRE/CoRE) metrics.
 - For the attribute types of scope and cost, SCE will use “NA” as Estimate Quality. The definitions proposed in the transparency document do not align with cost estimates, etc. From SCE’s interpretation, the Estimate Quality table is more aligned with understanding the mitigation parameter such as mitigation effectiveness.

Data Table #2: Risk Sensitivity

SCE Observations and Feedback:

- For purposes of this table, SCE assumes that the RSE is the Risk Score value that this sensitivity analysis is conducted on, and that the sensitivity is driven by mitigation effectiveness values only.
- For purposes of test driving and in light of the large number of scenario analyses, especially for Wildfire mitigations, SCE focused on providing analysis associated with 2025 scope. In addition, for Wildfire mitigation sensitivity analysis, SCE is only providing the analysis for one mitigation in each of the mitigation categories. (In this case, for System Hardening – Wildfire Covered Conductor, for Vegetation – Hazard Tree, for Inspections – Distribution-Ground, and for Alternative Technologies – EFD.)
- The documentation references “sensitivity” analysis, yet the documentation on the “reported parameter” counsels the use of “ranges to reflect the lower and upper test values.” One may infer that this instead refers to a “scenario”-based analysis rather than a sensitivity analysis. SCE will provide its interpretation below on the differences between these two.
 - Sensitivity Analysis – SCE interprets a sensitivity analysis as a small change in the “mitigation effectiveness parameter,” such as changing the parameter by a positive 1% and also by a negative 1%. It’s unusual to choose “ranges” for this sensitivity parameter as suggested in the instructions, as this perturbation is usually set, for example, at 1%.
 - Given that mitigations may impact more than one risk driver at a time, one would need to hold everything constant and adjust only one at a time. In the illustrative example below, there are three risk drivers, and the mitigation

addresses all three drivers. In the sensitivity runs, Run #1 adjusts Driver A by 1% upwards and holds constant the mitigation effectiveness for Drivers B and C. Run #2 adjusts Driver B by 1% upwards and holds constant the mitigation effectiveness for Drivers A and C. A similar construct appears for Run #3. Similar set of runs for the negative sensitivity analysis would be conducted using a negative 1% for each risk driver.

	Original Mitigation Effectiveness	Positive Sensitivity Run #1	Positive Sensitivity Run #2	Positive Sensitivity Run #3
Driver-A	5%	6%	5%	5%
Driver-B	10%	10%	11%	10%
Driver-C	15%	15%	15%	16%

- Scenario Analysis – This analysis addresses the question of what is the impact to RSEs if the mitigation effectiveness is changed based on a set of “high” and “low” case assumptions. This analysis is done at the portfolio/mitigation level and not calculated for each individual risk driver combination. Please see the illustrative example below. As such, there are two runs, one for the positivity sensitivity and one for the negative sensitivity.

	Original Mitigation Effectiveness	Positive Sensitivity Run	Negative Sensitivity Run
Driver-A	5%	9%	1%
Driver-B	10%	20%	3%
Driver-C	15%	23%	9%

- For purposes of providing options to Staff and parties to review, SCE has included both cases in the Sensitivity Table. For the following risks (Wildfire, Contact with Energized Equipment, and Underground Equipment Failure), SCE has conducted the analysis using the Sensitivity Analysis Framework. For all other RAMP risks, SCE conducted the analysis using the Scenario Analysis Framework.
- SCE recommends having a new column to document what the original RSE value is. We have added a new column “Original RSE Value” into the data table.
- For the negative and positive sensitivity columns, SCE used the RSEs associated with the positive and negative sensitivity analysis. We feel this provides a more transparent

representation of the data versus calculating the difference of the “positivity/negative” sensitivity value from the original RSE value and then dividing by the change in the sensitivity parameter. Parties using this table may add a new column themselves if they want to calculate the difference or change in RSE given the change in sensitivity. To SCE, it is not entirely clear what the change in the denominator would be using a Scenario Analysis framework.

- The Estimate Quality in this table is unclear. Is it referring to the Estimate Quality of the “sensitivity” variable that is being adjusted? In the “Sensitivity Analysis” framework discussed above, moving a variable +/- 1% has no “Estimate Quality” significance such as “High,” “Med,” or “Low.” For purposes of this table, SCE will interpret the Estimate Quality as referring only to the “Scenario Analysis” framework where judgments are made to the mitigation effectiveness numbers corresponding to the High and Low case scenarios.

Data Table #3: Risk Modeling Listing

SCE Observations and Feedback:

- SCE notes that using distributions is not a requirement in the current S-MAP Settlement and has provided more explanation in Chapter 2 of the RAMP report. Therefore, the Distribution column was populated with NA.
- To the extent that IOUs directly use specific mathematical distributions (e.g., Normal, Exponential, etc.) in their risk modeling, it would make sense to not only notate the distribution name but also delineate the parameters that define that particular distribution (e.g., Mean, standard deviation, etc.).