Please provide the following:

1. We noted that remediation Risk Scores are HIGHER than the pre-remediation scores, please explain why that is so.

SDG&E Response 01:

For risk-reducing activities that are categorized as Controls, the "post-mitigation" risk scores reflect the estimated risk if the activities are ceased. Because Controls that are currently in place help reduce risks, the risk scores will move higher if they no longer are performed.

2. We could not find any support for the determination of the actual LoRE figure. Please provide all the supporting work done that lists the discrete variables and shows how they were used to determine the LoRE for each risk so that we may follow how the LoRE was developed.

SDG&E Response 02:

Each risk has a unique method to estimate its Likelihood of Risk Event (LoRE). Some risks are estimated from specific data and others are formulated through a combination of subject matter expertise's interpretation of available data. The attached spreadsheet "SED 001_DR2.xlsx" shows a summary of how each LoRE was estimated.

3. The chapters simply showing the LoRE number in each chapter is not sufficient for our evaluation. We note that there are a lot of words describing the method to find the LoRE, but no calculations showing how specific LoRE values were developed.

SDG&E Response 03:

SDG&E Response 02 hopefully addresses the issue mentioned here.

- 4. What software application was used to model and calculate the inputs for the MAVF?
 - a. If Sempra used an Excel workbook/spreadsheet for this purpose, then provide the underlying Excel workbook/spreadsheet for each RAMP risk chapter. (If Excel was used for any part of the modeling process, please provide the Excel files used to support the calculation and/or modeling for each RAMP risk.)
 - b. If Excel was not used for modeling the variable inputs, then please provide the application which was used.

SDG&E Response 04:

Various software applications were used for different situations and risks. SoCalGas and SDG&E undertook an academic approach to researching and analyzing the data available and the integrity, format and suitability of the data, for example. Because the circumstances of the data regarding each risk required different methodologies and formulas, there is no one single method of how the values that were used in the MAVFs that were developed.

The types of software applications used to model and calculate inputs could be described as falling into two general categories: (1) applications used for conducting data research, verification, and adjustments; and (2) applications used for computations.

Software applications falling into the first category cover a wide range, depending on the type of data available, how that data is stored, and the reliability and format of the data. For example, the Microsoft Access database management application was used to pull information for SDG&E's Electric Infrastructure Integrity Risk Chapter.

Software applications falling into the second category cover a smaller range, and typically include Microsoft Excel and @RISK. For example, SoCalGas and SDG&E used Microsoft Excel and @RISK for the Medium Pressure Third Party Dig-in Risk.

- a. See response to Question 4 above. SoCalGas and SDG&E do not have underlying Excel spreadsheets showing value calculations for each RAMP risk chapter. SoCalGas and SDG&E have created the attached Excel file named SED 001_DR4, to provide SED with a summarized view of a single risk methodology, for the Medium Pressure Third Party Dig-in Risk. If SED finds the format of SED 001_DR4 useful, SoCalGas and SDG&E can create and supply similar workpapers for each of the other risks (but no similar additional Excel spreadsheets are currently available).
- b. See response to Question 4 and 4.a. above. SoCalGas and SDG&E do not have available underlying Excel spreadsheets showing value calculations for each RAMP risk chapter. SoCalGas and SDG&E can work with SED to provide access to models used in calculating MAVF inputs for individual RAMP risk chapters and/or provide additional Excel spreadsheets in the format of SED 001_DR4.

Please see the attached Excel file named SED 001_DR4.xlsm.