



**California Public
Utilities Commission**

Proposed Data Template Guideline for RAMP and GRC Applications

SAFETY POLICY DIVISION

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Background and Purpose:

Risk Assessment and Mitigation Phase (RAMP) and General Rate Case (GRC) filings are complex and cover hundreds of program areas and related risk mitigations, risk scores, and other information. Within the RDF Proceeding (R.20-07-013), Cal Advocates has recommended that the Commission prioritize consideration of data templates to support RAMP and GRC applications to ensure transparent utility reporting of:

- Appropriate units used for a specific mitigation, such as circuit miles, pipeline miles, asset units, staffing levels, inspection levels;
- The cost-efficiency for the specific levels of risk mitigation programs;
- Past and proposed effectiveness of risk mitigation programs, considering safety performance metrics, safety and operational metrics, or other specific mitigation effectiveness measures; and
- Past, current, and projected progress on all risk mitigation programs.¹

During Phase 3 Workshop #5 of the RDF Proceeding, CalAdvocates submitted a data template for party comment.² The Commission determined in D.24-05-064 that “the process, timing, and lexicon for the Risk Mitigation templates”³ need further development. In that decision, the Commission also authorized continuation of the Technical Working Group (TWG), established in D.21-11-009, to prepare and propose recommendations for refining the RAMP and GRC templates.⁴ In the Phase 4 Scoping Memo, the Commission established that TWGs would support Track 2 to answer the following questions:

- Should the Commission adopt required templates for data presentation for use in the RAMPs as proposed by Cal Advocates? If so, what should be the information requirements and format of the templates?
- What structured method, if any, for collecting and consolidating the more granular project-level data necessary to support the utilities’ proposed risk mitigation projects and show how the utilities determine specific targets and forecasts should be integrated into the RDF and adopted for use by the utilities?⁵

Since the adoption of D.24-05-064, Safety Policy Division has leveraged its work in previous RAMP proceedings and in the development of Commission Guidelines for the SB-884 Program to develop a draft data template for consideration during the Phase 4 Track 2 TWG. The purpose of this data template guideline is to provide clarity on the field name, field description, and field value constraints for each variable in the Staff Proposal Data Template that is attached to this document.⁶

¹ R.20-07-013, Cal Advocates Comments on Phase 3 Roadmap at 3.

² R.20-07-013, Phase 3 Workshop #5, CalAdvocates, Recommendation to Develop Risk Mitigation Project Templates, October 31 2023.

³ D.24-05-064 at 110.

⁴ Id.

⁵ R.20-07-013, Phase 4 Scoping Memo, September 13, 2024, at 11

⁶ You can also find this document here: <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-policy-division/meeting-documents/staff-proposal-data-template-rdf-phase-4-twg-all.xlsx>

Technical Working Group Questions:

This proposed data template is being issued to facilitate discussion during the Technical Working Groups. We expect parties to comment on the following:

- 1) How does the Staff Proposal Data Template help to reconcile any differences between the data template put forward by the utilities and Cal Advocates as they currently exist?
- 2) How does the Staff Proposal Data Template exacerbate the differences between the data template put forward by the utilities and Cal Advocates as they currently exist?
- 3) What additional data streams would parties like to see included in the final data template? Why? How would that data help parties and decision-makers in their evaluation of a utility's RAMP or GRC Application?
- 4) Which data streams do you think should not be included in the final data template? Why? How does removing the data stream from the template help parties and decision-makers in their evaluation of a RAMP or GRC Application?
- 5) Are there any errors within the field descriptions of each data stream that need to be corrected? If so, please provide recommended language for that field description and an explanation for why it needs to change.
- 6) Are there any incorrect field value constraints? If so, please explain what the correct field value constraint should be and why.

Template and Tables Structure

Table 1: Data Set (General)

This table collects the key elements and characteristics of a Risk Reporting Unit (RRU), including unique identifiers, mitigation plans, and associated risks.⁷ It defines how risk-related data is structured and categorized for consistent reporting across various operational divisions.

Tables 1 through 5 are anchored around the RRU ID field, which references uniquely identifiable RRUs with unique IDs. A utility's RRU ID naming schema must be simple and transparently understandable. A utility's RRU ID naming schema must include the GRC Activity Code of the relevant Proposed Mitigation Program, which must also be listed in Table 1. A utility's RRU ID naming schema must not result in the reuse of an RRU ID.

In Table 1, for each RRU there will be one row for the utility's proposed mitigation and one separate row for each alternative.⁸

Table 2: Cost Breakdown (General)

This table breaks down the costs associated with mitigation efforts, including labor, materials, and permits, for projects under the Risk Reporting Unit. It provides detailed cost allocation to track expenditure efficiently.

Table 3: Risk Model Change Tracker (Electric Grid Infrastructure Specific)

This table tracks changes and updates to the risk modeling and how that affects the risk associated with the assets and systems mitigated by the RRUs. This allows for comparing current and previous risk models, risk scores, and associated filings. It ensures transparency and accountability in how risks related to the electric grid are managed and reported.

Utilities regularly update their risk models. At times, the outputs (calculated risks) of new risk model versions are substantially different from the previous version(s). In some cases, utilities have changed the length and names of each circuit segment from one risk model to another. To address the lack of clarity of the impact caused by changing risk models between RAMP, GRC, and other filings, SPD created a template (Table 3) which can track the segment changes and significant changes that can occur in the calculated risk of each circuit segment from one risk model to the next. Table 3 collects data regarding changes in calculated risk, length, and name of each circuit segment, which utilities plan to include in its proposed mitigation programs. This enables the analysis and comparison of data created across different risk models and supports comparison of such data across various proceedings where such data may be presented.

⁷ For more information on the RRU, see R.20-07-013, Phase 4 Workshop 1, SPD Staff Proposal on Definition of Scoped Work and the Risk Reporting Unit, November 8 2024

⁸ Please see the Proposed and Alternative Mitigations field described below and in the Excel data template attached to this Guideline.

Table 4: HFTD and Associated Asset (Electric Grid Infrastructure Specific)

This table highlights low-risk associated assets mitigated alongside primary electric grid infrastructure related risks due to operational constraints or interconnected systems.⁹ It includes associated costs, miles, and risk reduction for comprehensive project management of risk on electric grid infrastructure.

Table 4 attempts to collect and clarify information regarding how the additional electric grid infrastructure associated assets can affect the risk reduction, costs and BCR of the proposed RRU.

Table 5: HCA/MCA and Associated Assets (Gas Infrastructure Specific)

Specific to gas operations, this table documents low-risk gas infrastructure associated assets mitigated alongside primary gas infrastructure due to operational constraints or interconnected systems.¹⁰ It includes associated costs, miles, and risk reductions to capture the nuances of gas system risk management.

Table 5 attempts to collect and clarify information regarding how the additional gas infrastructure associated assets can affect the risk reduction, costs and Benefit-Cost Ratio (BCR) of the proposed RRU.

Table 6: Financial Inputs (General)

This table provides financial parameters and metrics required to calculate and evaluate risk mitigations, including discount rates, customer-minute interruptions (CMI), the value of statistical life (VSL), and present value revenue requirements (PVRR). These inputs ensure that economic factors are systematically integrated into risk evaluations.

Table 7: Interruption Cost Estimate (ICE) Calculator Inputs

This table provides inputs that can be integrated into the ICE Calculator to estimate the cost per customer-minute interruption, by categorizing outages by time of day, season, and customer type. The ICE Calculator integrates key reliability metrics such as SAIDI and SAIFI to estimate the impact of service interruptions.

Based on data requests and responses issued in Pacific Gas and Electric’s (PG&E) 2024 RAMP Proceeding and in preparation of San Diego Gas and Electric’s (SDG&E) pre-filing workshop for its 2025 RAMP, SPD recommends that the utilities present ICE Calculator inputs that can be used to estimate the monetized value of electric reliability in a manner similar to the approach found in the SPD data requests.¹¹

⁹ In Table 4, “low-risk” is defined as electric grid infrastructure assets whose risk level is below the threshold of two standard deviations (where the standard deviation is a measure of the amount of variation of the values of a variable about its mean) compared to the median and average risk of electric grid infrastructure assets mitigated by the RRU.

¹⁰ In Table 5, “low-risk” is defined as gas infrastructure assets whose risk level is below the threshold of two standard deviations (where the standard deviation is a measure of the amount of variation of the values of a variable about its mean) compared to the median and average risk of gas infrastructure assets mitigated by the RRU.

¹¹ For additional details, see R.24-05-008, PG&E response to SPD data request SPD-PGE-2024RAMP-002 and SDG&E response to SPD data request SPD-SEMRA-2025RAMP-002.

Tables and Data Requirements

Table 1: Data Set (general)

Field Name	Field Description	Field Value Constraints
RRU ID	A unique value identifying the RRU. Risk Reporting Unit (RRU): A CPUC jurisdictional effort within Electric Operations or Gas Operations that simultaneously removes or mitigates a group of assets or systems that exhibit high levels of risk. The RRU must include common elements that should include, but are not limited to Consequence Attributes, Risk level, line item costs, work units and time. The RRU can be aggregated based on unique identifiers that should include, but are not limited to, hierarchy, risk event, tranche and mitigation type. ¹²	VARCHAR(255)
GRC Activity Code	This is the Activity Code for the Proposed Mitigation relevant to this RRU. Field values are expected to utilize the following notational systems: PG&E: Maintenance Activity Type (MAT) SCE: Work Breakdown Structure (WBS) Sempra: Capital Programs are defined at the budget code; Expense programs are defined at the workpaper. ¹³	VARCHAR(255)
GRC Activity Code Subdivision	The subdivision of the GRC Activity Code relevant to this RRU. An RRU can only have one GRC Activity Code Subdivision.	VARCHAR(255)
Filings	List of all filing(s), including advice letters and Petitions for Modification (PFMs), where the RRU is reported and a budget is requested including but not limited to a GRC application and Wildfire Mitigation Plan filing.	TEXT
Legislative District	Legislative District of the service territory in which the RRU is located.	VARCHAR(255)
Operational Division or Headquarter	Operational Division or Headquarter of the service territory in which the RRU is located.	VARCHAR(255)

¹² R.20-07-013, Phase 4 Workshop 1, SPD Staff Proposal on Definition of Scoped Work and the Risk Reporting Unit, November 8 2024 at 20. See also the discussion in R.20-07-013, Phase 4 Workshop 3, SPD Staff Proposal on Risk Mitigation Accountability Reports at 22, December 30 2024.

¹³ D.24-05-064, Appendix A, Row 28.

Field Name	Field Description	Field Value Constraints
Tranche Level	<p>The Tranche that includes the Assets or Systems that the RRU mitigates. Each RRU can only mitigate the risk exhibited by Assets or Systems found in one Tranche.</p> <p>Tranches are the quintiles of Likelihood of Risk Event (LoRE) and Consequence of Risk Event (CoRE). The structure of the Tranche level to record in this field is represented as LoRE quintile and CoRE quintile that make up each tranche. Thus, the Tranche Level should be presented in the following shorthand: CoRE 1×LoRE 2 or CoRE 2×LoRE 1</p> <p>If the utility opts to write a whitepaper presenting an alternative approach to tranches, they must create a clear and concise shorthand for the structure of the tranches.¹⁴</p>	VARCHAR(255)
List of Asset(s) or System(s)	<p>List of that unique Assets and their specific portions and/or the unique Systems that exhibit risk, which is mitigated by the RRU.¹⁵</p> <p>This should include, but not limited to, the following examples: For the electrical system: Isolatable Circuit Segments or Circuit Segments For the gas system: Pipeline Segments or other gas assets between valves, compressor stations, M&C facilities</p>	TEXT
Total Work Units	Total number of work units included in the RRU.	REAL
Risk Ranking	Ranking of the total pre-mitigated risk that is exhibited by the assets or systems that the RRU mitigates (E.g., where the risk level of the assets or systems mitigated by the RRU lies in comparison with risk level of the assets or systems mitigated by other RRUs across the entire Proposed Mitigation Program).	VARCHAR(255)

¹⁴ For more detail on the Tranche Level field, see D.24-05-064 at 26-33 and D.24-05-064, Appendix A, Row 14. Even if the utility records a Tranche Level in this field that accords with the tranche structure in its alternative approach to tranches, SPD reserves its right to challenge any alternative approach to tranches if it is applied to any risk when the utility files its RAMP application (See D.24-05-064 at 31).

¹⁵ Asset is defined as a retirement unit as defined by Federal Energy Regulatory Commission (FERC) Uniform System of Accounts (USOA) that exhibits risk. A System is defined as a regularly interacting or interdependent group of items forming a unified whole that exhibits risk and cannot be classified as a retirement unit. See R.20-07-013, Phase 4 Workshop 1, SPD Staff Proposal on Definition of Scoped Work and the Risk Reporting Unit, November 8 2024 at 20.

Field Name	Field Description	Field Value Constraints
Primary Risk Event Mitigated	Primary risks targeted for mitigation by the RRU.	VARCHAR(255)
Secondary Risk Event Mitigated	List of Secondary risks targeted for mitigation by the RRU.	VARCHAR(255)
Status	<p>Preset domain to identify the current status of RRU mitigation. The preset options include:</p> <ul style="list-style-type: none"> • <u>Scoping</u>: Identifying the size and timeline of the RRU. Scoping is the first step to providing visibility to the construction feasibility and possible execution timing. • <u>Designing</u>: Delineation of a plan for implementing the RRU including determining the RRU's integration within existing infrastructure or operations and need for materials, training, or permitting. The costs for completing the RRU, including for permitting, labor and materials, are forecasted at this stage. • <u>Permitting</u>: The process of obtaining the rights and permits from relevant stakeholders to implement the RRU. This stage of the lifecycle also includes negotiating of contracts to implement the RRU as well as final estimation of the costs associated with implementing the RRU. • <u>Construction/Implementation</u>: During this stage a capital investment is built out or an operational activity is put into action. Capital investments are complete when they are used and useful. Operational activities could be an ongoing means of maintaining a level of risk. • <u>Post-Construction</u>: For capital investments, there can be final paperwork and updates to asset registries after the scoped work is used and useful.¹⁶ 	VARCHAR(255)
Scoping Date	The year and month the utility intends to begin or did begin the scoping process of this mitigation for the RRU.	Date (YYYY-MM) ¹⁷

¹⁶ Information about the Status field can also be found in R.20-07-013, Phase 4 Workshop 1, SPD Staff Proposal on Definition of Scoped Work and the Risk Reporting Unit, November 8 2024 at 10-11.

¹⁷ If the year, month and day is available, the utility must record this information in this field using the YYYY-MM-DD format.

Field Name	Field Description	Field Value Constraints
Start Date	The year and month the utility intends to begin or did begin the construction or implementation of the RRU.	Date (YYYY-MM) ¹⁸
Used and Useful Date	The year and month the utility intends to make or did make this RRU used and useful. Used and useful means to be fully complete and providing service to customers.	Date (YYYY-MM) ¹⁹
Proposed and Alternative Mitigations	This field must include the Proposed Mitigation and the Alternative Mitigations that the utility has considered for this RRU. All following risk and cost analyses are carried on based on the value inputted within this field. ²⁰ This field enables comparing risk analyses of several alternative mitigations options for the same RRU.	VARCHAR(255)
Proposed Mitigation Justification 1	Primary reason for choosing the proposed mitigation measures that the utility proposed for the RRU. This field can include, but is not limited to, responses such as operational limitations, cost efficiency, continuity, and benefits for other risk events.	VARCHAR(255)
Proposed Mitigation Justification 2	Other reasons for choosing the proposed mitigation measures that utility proposed for the RRU. This field can include, but is not limited to, responses such as operational limitations, cost efficiency, continuity, and benefits for other risk events.	VARCHAR(255)
Pre-mitigated Likelihood of the Risk Event	The likelihood of a Risk Event occurring before Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU.	REAL
Pre-mitigated Safety Consequences	The unscaled expected value of Safety Consequences (e.g., injuries or fatalities) before the Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU. (Natural Units)	REAL
Pre-mitigated Reliability Consequences	The unscaled expected value of Reliability Consequences (e.g., Customer minutes interrupted) before the Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU. (Natural Units)	REAL

¹⁸ If the year, month and day is available, the utility must record this information in this field using the YYYY-MM-DD format.

¹⁹ If the year, month and day is available, the utility must record this information in this field using the YYYY-MM-DD format.

²⁰ For more information on alternative mitigation analysis, see D.18-12-014 at 34.

Field Name	Field Description	Field Value Constraints
Pre-mitigated Financial Consequences	The unscaled expected value of Financial Consequences before the Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU. (Natural Units)	REAL
Post-mitigated Likelihood of the Risk Event	The likelihood of the Risk Event occurring after the Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU.	REAL
Post-mitigated Safety Consequences	The unscaled expected value of Safety Consequences (e.g., injuries or fatalities) after the Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU. (Natural Units)	REAL
Post-mitigated Reliability Consequences	The unscaled expected value of Reliability Consequences (e.g., Customer minutes interrupted) after the Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU. (Natural Units)	REAL
Post-mitigated Financial Consequences	The unscaled expected value of Financial Consequences after the Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU. (Natural Units)	REAL
Pre-mitigated Risk	Unscaled value of Risk before the Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU (Dollar Value)	REAL
Post-mitigated Risk	Unscaled value of Risk after the Proposed and Alternative Mitigations measures are applied to the assets or system associated with this RRU (Dollar Value)	REAL
Mitigation Benefit	Present value of the Risk Reduction of the Proposed and Alternative Mitigations measure for the RRU. (Dollar Value)	REAL
Total Costs	Total nominal value of the expenditures of the Proposed and Alternative Mitigations for the RRU. This value must be identical with the Total Costs field in Table 3.	REAL
Present Value Costs	Present value of the costs of the Proposed and Alternative Mitigations for the RRU.	REAL
Benefit-Cost Ratio	Benefit-Cost Ratio of the Proposed and Alternative Mitigations for the RRU.	REAL

Field Name	Field Description	Field Value Constraints
Risk Model	Name and Version of Risk Model used to calculate Benefit-Cost Ratio of the Proposed and Alternative Mitigations for the RRU.	VARCHAR(255)
Reporting Date	The date the risk and costs for the Proposed and Alternative Mitigations for the RRU are reported.	Date (YYYY-MM-DD)
Calculated Date	The date the risk and costs for the Proposed and Alternative Mitigations for the RRU are calculated.	Date (YYYY-MM-DD)

Table 2: Cost Breakdown (general)

Field Name	Field Description	Field Value Constraints
RRU ID	A unique value identifying the RRU.	
Proposed and Alternative Mitigations	<p>This field must include the Proposed Mitigation and the Alternative Mitigations that the utility has considered for this RRU. All following cost analyses are carried on based on the value inputted within this field.</p> <p>This field enables comparing risk analyses of several alternative mitigations options for the same RRU.</p> <p>This value must be identical with the Proposed and Alternative Mitigations field in Table 1.</p>	VARCHAR(255)
Labor	Including all the required Engineering, design, and Construction	REAL
Materials	All the required material costs	REAL
Permits and Environmental Costs	<p>Permitting fees from local and state agencies.</p> <p>Environmental impact assessments and mitigation measures.</p>	REAL
Other Costs	Other costs that are not categorized in the rows above	REAL
Total Costs	<p>Total nominal value of the expenditures of the Proposed and Alternative Mitigations for the RRU.</p> <p>This value must be identical with the Total Costs field in Table 1.</p>	REAL
Reporting Date	The date the risk and costs for the Proposed and Alternative Mitigations for the RRU are reported.	Date (YYYY-MM-DD)
Calculated Date	The date the risk and costs for the Proposed and Alternative Mitigations for the RRU are calculated.	Date (YYYY-MM-DD)

Table 3: Risk Model Change Tracker (Electric grid Infrastructure Specific)

Field Name	Field Description	Field Value Constraints
RRU ID	A unique value identifying the RRU.	VARCHAR(255)
Current Risk Model	Name and Version of the updated Risk Model used to calculate Benefit-Cost Ratio (E.g., V2)	VARCHAR(255)
Total Miles	Total circuit miles under Current Risk Model for the RRU.	VARCHAR(255)
HFTD Miles	Total miles in High Fire-Threat District (HFTD) under Current Risk Model for the RRU.	VARCHAR(255)
Current Pre-mitigated Risk Score	Risk score calculated under the Current Risk Model for the RRU. (Dollar Value)	VARCHAR(255)
Current Risk Percentage	Risk score divided by the total risk score calculated using the Current Risk Model for the RRU.	VARCHAR(255)
Change Type	Identification of how the assets or systems mitigated by the RRU have been defined and redefined since the last update: <ul style="list-style-type: none"> • New Data Inputs to Risk Model • New Construction, • Rename • Split • Merge • Other 	
Change Date	Date the assets or systems mitigated by the RRU were changed	Date (YYYY-MM-DD)
Previous Risk Model	Name of the previous Risk Model used to calculate risk for the RRU.	VARCHAR(255)
Previous Total Miles	Total circuit miles under Previous Risk Model for the RRU.	VARCHAR(255)
Previous HFTD Miles	Total miles in High Fire-Threat District (HFTD) under Previous Risk Model and for the RRU.	VARCHAR(255)
Previous Pre-mitigated Risk Score	Pre-mitigated risk score calculated under Previous Risk Model for the RRU. (Dollar Value)	VARCHAR(255)
Previous Risk Percentage	Percentage of total risk attributed to this RRU under Previous Risk Model for the RRU.	VARCHAR(255)
Reporting Date	The date the risk and costs associated with the Current Risk Model are reported	Date (YYYY-MM-DD)
Calculated Date	The date the risk and costs associated with the Current Risk Model are calculated	Date (YYYY-MM-DD)

Table 4: HFTD and Associated Asset (Electric grid Infrastructure Specific)

Field Name	Field Description	Field Value Constraints
RRU ID	A unique value identifying the RRU.	VARCHAR(255)
HFTD Tier 3 Miles	If applicable, total number of units included in the RRU located in HFTD Tier 3	REAL
HFTD Tier 2 Miles	If applicable, total number of miles included in the RRU located in HFTD Tier 2	REAL
Fire Rebuild Miles	If applicable, total number of miles included in the RRU located in Fire Rebuild	REAL
Associated Assets	List of all connected low risk Associated Assets that the utility plans to mitigate because of operational constraints or reasons other than the reducing risk (e.g., Service lines and Secondary lines).	TEXT
Associated Asset Work Units	Total associated asset work units included in the RRU.	REAL
Proposed and Alternative Mitigations	<p>This field must include the Proposed Mitigation and the Alternative Mitigations that the utility has considered for this RRU. All following cost and risk analyses are carried on based on the value inputted within this field.</p> <p>This field enables comparing risk analyses of several alternative mitigations options for the same RRU.</p> <p>This value must be identical with the Proposed and Alternative Mitigations field in Table 1.</p>	VARCHAR(255)
Costs for Associated Assets	The expenditures of the Proposed and Alternative Mitigations measure on all of the Associated Assets	REAL
Risk Reduction for Associated Assets	The Risk Reduction of the Proposed and Alternative Mitigations measure on all of the Associated Risk Assets	REAL
Reporting Date	The date the risk and costs for the Proposed and Alternative Mitigations for the RRU are reported.	Date (YYYY-MM-DD)
Calculated Date	The date the risk and costs for the Proposed and Alternative Mitigations for the RRU are calculated.	Date (YYYY-MM-DD)

Table 5: HCA/MCA and Associated Assets (Gas Infrastructure Specific)

Field Name	Field Description	Field Value Constraints
RRU ID	A unique value identifying the RRU.	VARCHAR(255)
High Consequence Area (HCA) miles	If applicable, total number of miles included in the RRU located in the HCA.	REAL
Moderate Consequence Area (MCA) miles	If applicable, total number of miles included in the RRU located in the MCA.	REAL
Associated Assets (Gas)	List of all connected low risk Associated Assets that utilities plan to mitigate because of operational constraints or other reasons (e.g., Environmental Factors, Broader Infrastructure Coordination such as Other Gas Asset Replacement Projects, Electrical Infrastructure Projects, Transition to Renewable Natural Gas).	TEXT
Associated Asset Work Units (Gas)	Total associated asset work units included in the RRU.	REAL
Proposed and Alternative Mitigations	<p>This field must include the Proposed Mitigation and the Alternative Mitigations that the utility has considered for this RRU. All following cost and risk analyses are carried on based on the value inputted within this field.</p> <p>This field enables comparing risk analyses of several alternative mitigations options for the same RRU.</p> <p>This value must be identical with the Proposed and Alternative Mitigations field in Table 1.</p>	VARCHAR(255)
Costs for Associated Assets (Gas)	The expenditures of the Proposed and Alternative Mitigations measure on all of the Associated Assets	REAL
Risk Reduction for Associated Assets (Gas)	The Risk Reduction of the Proposed and Alternative Mitigations measure on all of the Associated Risk Assets	REAL
Reporting Date	The date the risk and costs for the Proposed and Alternative Mitigations for the RRU are reported.	Date (YYYY-MM-DD)
Calculated Date	The date the risk and costs for the Proposed and Alternative Mitigations for the RRU are calculated.	Date (YYYY-MM-DD)

Table 6: Financial Inputs

Field Name	Field Description	Field Value Constraints
Terrain modifier	Modifier to account for how different types of terrain (e.g., flatlands, hills, mountains) affect the increased costs associated with building or maintaining infrastructure in difficult terrains.	VARCHAR(255)
WACC Discount Rate	The Weighted Average Cost of Capital (WACC) Discount Rate Scenario the utility must use to calculate Present Value Benefits and Costs as well as the BCR for an RRU. ²¹	REAL
Societal Discount Rate	The Societal Discount Rate Scenario the utility must use to calculate Present Value Benefits and Costs as well as the BCR for an RRU. ²²	REAL
Hybrid Discount Rate	The Hybrid Discount Rate Scenario the utility must use to calculate Present Value Benefits and Costs as well as the BCR for an RRU. ²³	REAL
VSL	Dollar value of statistical life used to monetize the Safety Consequence ²⁴	REAL
Standard Dollar Valuation of Electric Reliability	Dollar value per customer minute interrupted as estimated by the Interruption Cost Estimate Calculator ²⁵	REAL
Standard Dollar Valuation of Gas Reliability	Dollar value per customer minute interrupted based on the implied value from a utility's most recent RAMP ²⁶	REAL
PVRR	PVRR or Present Value Revenue Requirement is the financial metric the utility used in its rate case and long-term planning to evaluate the cost implications of investments or programs over the life of the asset.	REAL
Escalation factor	The escalation factor to account for the anticipated increase in costs over time due to factors like inflation, labor cost increases, material cost changes, or other economic conditions.	REAL

²¹ D.24-05-064 at 103

²² D.24-05-064 at 102-103

²³ D.24-05-064 at 103

²⁴ D.22-12-027, OP 2a

²⁵ D.22-12-027, OP 2b

²⁶ D.22-12-027, OP 2c

Table 7: Interruption Cost Estimate Calculator Inputs

Field Name	Field Description	Field Value Constraints
Operational Division by HTFD or Non-HTFD	Designation of HFTD or Non-HFTD service territory within a given Operational Division or Headquarters	VARCHAR(255)
Number of Affected Customers- Residential	Total number of residential customers affected by the risk event.	REAL
Number of Affected Customers- Small C&I	Total number of small commercial and industrial customers affected by the risk event.	REAL
Number of Affected Customers- Medium and Large C&I	Total number of medium and large commercial and industrial customers affected by the risk event.	REAL
Annual Usage per Customer (MWh) - Residential	Average annual electricity usage in megawatt-hours for residential customers.	REAL
Annual Usage per Customer (MWh) - Small C&I	Average annual electricity usage in megawatt-hours for small commercial and industrial customers.	REAL
Annual Usage per Customer (MWh) - Medium and Large C&I	Average annual electricity usage in megawatt-hours for medium and large commercial and industrial customers.	REAL
Medium and Large C&I- Manufacturing %	Percentage of medium and large commercial and industrial customers engaged in manufacturing.	REAL
Small C&I- Construction %	Percentage of small commercial and industrial customers engaged in construction	REAL
Small C&I- Manufacturing%	Percentage of small commercial and industrial customers engaged in manufacturing.	REAL
Small C&I- Backup generation%	Percentage of small commercial and industrial customers with backup generation.	REAL
Percentage of Outage Morning	Outages by time of Day-Morning (6 am to 12 pm)	REAL
Percentage of Outage Afternoon	Outages by time of Day-Afternoon (12 pm to 5 pm)	REAL
Percentage of Outage Evening	Outages by time of Day-Evening (5 pm to 10 pm)	REAL
Percentage of Outage Night	Outages by time of Day-Night (10 pm to 6 am)	REAL
Percentage of Outage Summer	Outages by time of Year- Summer (June through September)	REAL

Field Name	Field Description	Field Value Constraints
Percentage of Outage Non-Summer	Outages by time of year- non-Summer (October through May)	REAL
SAIDI	System Average Interruption Duration Index. It is calculated by dividing the total minutes of customer interruptions by the total number of customers served.	REAL
SAIFI	System Average Interruption Frequency Index. It is calculated by dividing the total number of customer interruptions by the total number of customers served.	REAL
Reporting date	The date the ICE Calculator Inputs are reported for the Operational Division by HTFD or Non-HTFD	Date (YYYY-MM-DD)
Calculated date	The date the ICE Calculator Inputs are calculated for the Operational Division by HTFD or Non-HTFD	Date (YYYY-MM-DD)

Recommendations

These recommendations are based on the preceding sections and assume the reader has read and understood those sections. SPD recommends that the Commission:

1. Allow SPD to be able to make updates and changes to the data template without the need for a Commission Decision or Staff Resolution.
2. Require Southern California Edison to submit these data templates with its 2026 RAMP Application.
3. Require the Sempra Companies to submit these data templates with its 2028 GRC Application.