California Public Utilities Commission

SB 884 Project List Data Requirements Guidelines

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Background and Purpose:

Pursuant to Senate Bill (SB) 884 (McGuire; Stats. 2022, Ch. 819), the California Public Utilities Commission's (CPUC or Commission) data requirements for a large electrical corporation's Electrical Undergrounding Plan (EUP) intended to mitigate wildfire risk in the High Fire Threat District (HFTD), will be complex and require coordination with the Office of Energy Infrastructure Safety's (Energy Safety) Guidelines and data templates. Attached to Resolution SPD-15,[1] the Commission issued the *SB 884 Project List Data Requirements-Preliminary* to begin the discussion on how a utility should submit tabular and geospatial data in support of a Phase 2 Application related to its EUP.[2] Ordering Paragraph 3 of SPD-15 stated that:

> Following Energy Safety's publication of its SB 884 Guidelines, SPD is authorized to convene a Technical Working Group (TWG) to review and align the preliminary CPUC SB 884 Project List Data Requirements and Geographic Information System (GIS) data requirements with Energy Safety Guidelines, adding any data elements necessary for Commission conditional approval purposes.

Additionally, Ordering Paragraph 4 of SPD-15 stated that:

> SPD is authorized to develop and issue the SB 884 Project List Data Template within 30 days of the final TWG meeting.

As discussed below, the final TWG meeting was held on June 24 2025. Thus, by issuing the *SB 884 Project List Data Requirements Guidelines* (henceforth referred to as the *CPUC SB 884 Data Guidelines*) to the SB 884 Notification List on July 24 2025, SPD has completed the requirements of Ordering Paragraph 4 in SPD-15.

On February 20, 2025, Energy Safety published Guidelines that a utility must follow to submit an EUP to that agency.[3] Energy Safety's Guidelines include extensive discussion of data requirements that require the Commission to review and determine the best way to align its own data requirements for a utility's Phase 2 Application for the EUP. Following the TWGs discussed below, the *CPUC SB 884 Data Guidelines* represents an alignment between the data needs of the Commission to evaluate conditional approval of costs and the requirements found in the Energy Safety Guidelines as was required by Ordering Paragraph 3 in SPD-15.

On January 30, 2025, Safety Policy Division (SPD) presented a Risk Assessment and Mitigation Phase (RAMP) data template Guidelines and data template as part of a TWG in Phase 4 of the Risk-Based Decision-Making Framework (RDF) Proceeding (R.20-07-013).[4] On February 11, 2025, an Administrative

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[1] Resolution SPD-15 is available at https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-policy-division/documents/final-resolution-spd15-adopting-the-commissions-guidelines-for-the-senate-bill-sb-884-program.pdf.

[2] SPD-15, Attachment 1, Appendix 1 at 15-18.

[3] Office of Energy Infrastructure Safety, 10-Year Electrical Undergrounding Plan Guidelines, February 20, 2025, https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=58006&shareable=true.

[4] The RAMP is a process, a utility complies with before initiating a GRC that requires energy-utility safety-risk threat assessments along with associated proposed mitigation plans, and estimated costs and spending requests. The RDF proceeding examines how to calculate risk mitigation levels for various safety measures in order to ensure utilities focus on the most cost effective risk reduction strategies in their safety work, including wildfire-related safety.

Law Judge Ruling filed SPD's RAMP data template Guidelines and data template to the RDF Proceeding[5] SPD recognizes that it will be crucial that a data template for a Phase 2 Application also align with the data template needed in a RAMP and GRC Application. The structure of the *CPUC SB 884 Data Guidelines* is influenced by the discussion of Staff's data template Guidelines presented in the RDF Proceeding.

Commission Staff issued a "Staff Report on SB-884 Projects List Data Requirements Guideline" (or Staff Report) on May 20, 2025, which included a set of "Technical Working Group Questions". Commission Staff then hosted a series of three TWG meetings in June 2025. During the SPD TWG meeting #1, held on June 3, 2025 , SPD Staff presented the Staff Report and addressed questions from stakeholders regarding potential updates to the SB 884 Project List Data Requirements. In a May 15, 2025 e-mail to the SB 884 Notification List, SPD offered the opportunity for any stakeholder to present their feedback and recommendations on the Staff Report. No stakeholders accepted this opportunity. However, Staff did receive a list of questions from Pacific Gas and Electric Company (PG&E), which it requested to be discussed during the SPD TWG meeting #2 on June 10, 2025. Additionally, the SPD TWG meeting #3 on June, 24, 2025, included presentations from Lawerence Berkeley National Labs and PG&E on the Interruption Cost Estimate Calculator (ICE 2.0). Stakeholders held additional discussion related to the way ICE 2.0 was addressed within the Staff Report. Finally, Staff accepted stakeholder responses to the "Technical Working Group Questions" on June 24, 2025. The input received from stakeholders, along with the adoption of the Energy Safety Guidelines, informs the *CPUC SB 884 Data Guidelines* presented in this document.

The purpose of the *CPUC SB 884 Data Guidelines* is to provide clarity on the field name, field description, and field value constraints in the SB 884 Project List Data Template. Additionally, the *CPUC SB 884 Data Guidelines* is a revision of *SB 884 Project List Data Requirements-Preliminary* that was attached to SPD-15.

For each project included in the Plan and Application, the large electrical corporation shall provide, at a minimum, all data listed in the *CPUC SB 884 Data Guidelines* in tabular format. This information shall be provided as both a Microsoft Excel file and a searchable pdf file to supplement the Application. The large electrical corporation shall provide the latest version of the data required by the *CPUC SB 884 Data Guidelines* at the time of its Application submission. Additionally, at a minimum, the six-month progress reports filed by a large electrical corporation shall include an update of the data required in the *CPUC SB 884 Data Guidelines.*[6] The data values provided in each update of the data required in the *CPUC SB 884 Data Guidelines* should correspond to the date listed in each of the Reporting_Date fields found at the end of Tables 1-6.

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[5] Administrative Law Judge's Ruling Entering Phase 4 Technical Working Group Materials and Related Staff Proposal into the Record and Setting Comment Schedule, February 11, 2025, https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=556602565.

[6] Energy Safety Guidelines at 25-26.

Note on Terminology:

1. The term "Risk" in this document corresponds to "Overall Utility Risk" (unless otherwise noted) as defined in the Energy Safety Guidelines.[7]

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[7] The 10-Year Electrical Undergrounding Plan Guidelines published by Office of Energy Infrastructure Safety on February 20, 202 , page A-4.

Template and Tables Structure

Table 1: Data Set

This table collects the key elements and characteristics of a Risk Reporting Unit (RRU), including unique identifiers, mitigation plans, and associated risks.[8] Table 1 defines how risk-related data elements are structured and categorized for consistent reporting across various progress reports and geographic locations.

As stated in the introduction, it is necessary to align the SB 884 Project List Data Template with the RAMP Data Template discussed in the RDF Proceeding.[9] Here we present a definition of, asset, RRU and system to clarify that these concepts must be shared across RAMP and SB-884 Applications.

- Asset: A retirement unit as defined by Federal Energy Regulatory Commission (FERC) Uniform System of Accounts (USOA) that exhibits risk.[10]
- Risk Reporting Unit (RRU): A CPUC jurisdictional effort within Electric Operations or Gas Operations that simultaneously removes or mitigates the risk associated with a group of contiguous assets or systems that exhibit high levels of risk. The RRU must include common elements that must include, but are not limited to Consequence Attributes, Risk level, line-item costs, benefit-cost ratios (CBRs), work units and time. The RRU can be aggregated along several dimensions based on unique identifiers that include, but are not limited to, hierarchy,[11] scenario,[12] version,[13] risk event, tranche, and mitigation type.
- System: A regularly interacting or interdependent group of items forming a unified whole that exhibits risk and cannot be classified as a retirement unit.

Unless otherwise specified, such as certain fields in Table 4, all data requirements related to assets, RRUs, and systems apply to but are not limited to, primary, secondary and service lines.

Additionally, to conform with the requirements of the CPUC's SB 884 Guidelines found in SPD-15 or any successor Commission order or decision, the RRU must be:

1. Traceable through all stages of a lifecycle, including but not limited to the project's scoping, designing, permitting, construction/implementation, post-construction, retirement/decommissioning.
2. Auditable in terms of timing, location, work units, costs, and Risk Reduction.
3. Forecastable to at least the 10th year of the EUP.

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[8] 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.

[9] Any updates in the RDF Proceeding may result in an update in the SB-884 Data Template Guidelines.

[10] For the FERC USOA, see 18 CFR Part 101 https://www.ecfr.gov/current/title-18/chapter-I/subchapter-C/part-101

[11] Hierarchy refers to a utility's organizational hierarchy, such as an Electric Distribution Division or a Gas Distribution Division. as well as other ways of categorizing high risk assets and systems (i.e. HFTDs, circuits, regions, etc.).

[12] Scenario refers to forecasts, results, and projections.

[13] Version refers to a risk model version.

4. Able to aggregate up to the EUP.[14]

Utilities shall use these definitions and requirements to present RRU level data in their EUP. The level of granularity required is discussed below.

Tables 1 through 4 are anchored around the RRU_ID field, which references uniquely identifiable RRUs with unique identification numbers (i.e., 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 Undergrounding Project, 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.

Table 1 shall be submitted with the Phase 2 Application and all subsequent progress reports. In cases where RRU_IDs have not yet been created for certain projects, for the reasons outlined below, the table must be submitted using the corresponding OEIS_Project_ID.[15] Once more detailed and updated information becomes available, reporting in six-month progress reports shall transition to the RRU_IDs. The utility must continue reporting OEIS_Project_IDs to enable traceability and continuity across reports.

The fields OEIS_Project_ID and OEIS_Subproject_ID directly align to the Energy Safety Guidelines and enable coordination with the data templates submitted with the EUP to Energy Safety.[16] All requirements found in the Energy Safety Guidelines for OEIS_Project_ID and OEIS_Subproject_ID also apply to this data template.

If the utility submits a Phase 2 Application that does not use Subprojects, then the Commission requires that the granularity of the RRU be identical to that of the Project as defined in the Energy Safety Guidelines (see Figure 1). If the utility submits a Phase 2 Application that uses Subprojects the Commission requires that the granularity of the RRU be identical to that of the Subproject once detailed Subproject data is available, which means that each RRU_ID can only be tied to a single OEIS_Subproject_ID (Figure 2). Once an RRU_ID is created for a Subproject, all data must be reported using the unique RRU_IDs, OEIS_Project_IDs and OEIS_Subproject_IDs.
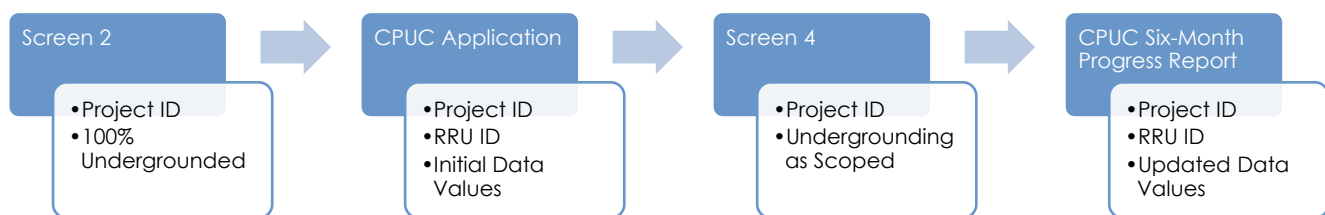

Figure 1: Process for creating an RRU_ID and Data Submissions for Phase 2 Application without Subprojects

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[14] These three requirements have been adapted from the Staff Scoped Work Proposal to conform to the requirements of the SB-884 program.

[15] OEIS_Project_ID corresponds to project_ID, as defined in the 10-Year Electrical Undergrounding Plan Guidelines published by Office of Energy Infrastructure Safety on February 20, 2025 (at C-24).

[16] OEIS_Subproject_ID corresponds to subproject_ID, as defined in the 10-Year Electrical Undergrounding Plan Guidelines published by Office of Energy Infrastructure Safety on February 20, 2025 (at C-36).
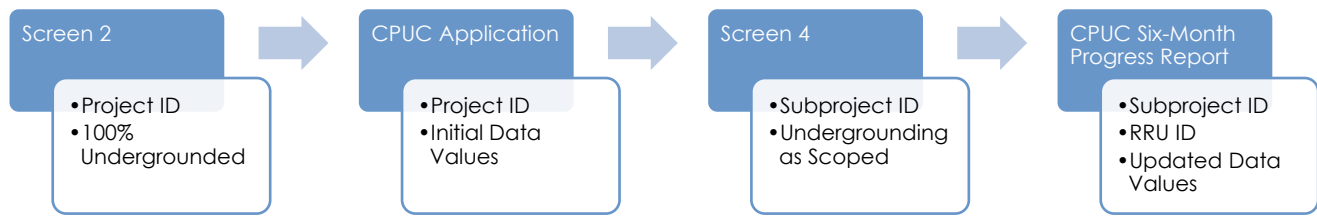
Figure 2: Process for creating an RRU_ID and Data Submissions for Phase 2 Application with Subprojects

If the utility elects to use Subprojects in its Phase 2 Application, then when the utility submits its Phase 2 Application to the Commission, it is possible that detailed Subproject level forecasts may not be available. In the case where the utility submits a Phase 2 Application that uses Subprojects and the Subproject level forecasts are not available, for the initial dataset submitted with the utility's Phase 2 Application, the utility may present forecasts at the Project Level, which should correspond with the Screen 2 data presented by the utility in Table C.11 of the Energy Safety Guidelines.[17] The forecasts presented at the Project Level in the initial dataset submitted with the Application will correspond to the "100% Undergrounded" concept defined in the Energy Safety Guidelines.[18] The RRU_ID field may be left blank at this point. Once detailed Subproject data is available, an RRU_ID must be created for each Subproject, and all data must be reported using the unique RRU_IDs, OEIS_Project_IDs and OEIS_Subproject_IDs.

When the utility submits its Phase 2 Application or six-month progress reports to the Commission, it is required that for any Project (i.e., OEIS_Project_ID) that passes Screen 4 of the Energy Safety Guidelines, the utility shall provide data values in the Commission's data template that should correspond with the Screen 4 data presented by the utility in Table C.13 of the Energy Safety Guidelines.[19] If the utility submits a Phase 2 Application that uses Subprojects, then the detailed RRU level data values submitted to the Commission should correspond with the Subproject data presented by the utility in Table C.14 of the Energy Safety Guidelines.[20]

If the Project has passed Screen 4 of the Energy Safety Guidelines, then the information presented at the Project or Subproject Level in the dataset submitted with either the Phase 2 Application or the six-month progress reports will correspond to the "Undergrounding as Scoped" concept defined in the Energy Safety Guidelines.[21]

For utilities that submit Projects in their Phase 2 Application and do not plan to break them into Subprojects later, the utility may continue reporting data at the Project level throughout both the Phase 2 Application and subsequent six-month progress reports. In these cases, the utility must still align its data with the appropriate Energy Safety Guidelines tables initially using Table C.11 for Screen 2 forecasts and then updating with Table C.13 data for Projects that pass Screen 4. RRU_IDs shall be created for the

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[17] Office of Energy Infrastructure Safety, 10-year Electrical Undergrounding Plan Guidelines, February 20, 2025, at C-25 – C-26.

[18] Office of Energy Infrastructure Safety, 10-year Electrical Undergrounding Plan Guidelines, February 20, 2025, at 44.

[19] Office of Energy Infrastructure Safety, 10-year Electrical Undergrounding Plan Guidelines, February 20, 2025, at C-30 – C-32.

[20] Office of Energy Infrastructure Safety, 10-year Electrical Undergrounding Plan Guidelines, February 20, 2025, at C-33 – C-35.

[21] Office of Energy Infrastructure Safety, 10-year Electrical Undergrounding Plan Guidelines, February 20, 2025, at 44.

Project, and all reporting remains at the Project level. All data must be reported using the unique RRU_ID and OEIS_Project_IDs from the Phase 2 Application. (Figure 2)

Table 1 also collects Backcasted_Cost_Benefit_Ratio, Backcasted_Total_Mitigation_Benefit and Backcasted_Present_Value_Costs. In order to align with the concept of a Backcast as discussed in the RDF Proceeding, the following definition applies:

- Backcast: use updated inputs (e.g., new RRUs, new risk models) to recalculate Cost-Benefit Ratios, pre-mitigated risk, post-mitigated risk or other data elements. The goal of a Backcast is to establish a bridge between prior inputs and new inputs, to ensure an "apples-to-apples" comparison.

When a utility elects to use the Subproject designation, the concept of a Backcast is essential in the SB-884 context to enable a consistent comparison between the forecasted RRU values reported in the progress reports and the backcasted RRU values that would have been calculated, had the RRU structure been applied in the Phase 2 Application using the data submitted at that time. For a utility that elects to use the Subproject designation the Backcasted_Total_Mitigation_Benefit, Backcasted_Present_Value_Costs and Backcasted_Cost_Benefit_Ratio fields may be left blank in the Phase 2 Application for OEIS_Project_IDs that have yet to establish an RRU_ID. For a utility that elects to align an RRU_ID with the OEIS_Project_ID (i.e. does not use the Subproject designation) there is no need to complete the Backcasted_Total_Mitigation_Benefit Backcasted_Present_Value_Costs, and Backcasted_Cost_Benefit_Ratio fields.

Table 1 also collects Unit_Cost_Percentage_Difference, calculated as:

$$\text{Unit\_Cost\_Percentage\_Difference} = \frac{\text{Forecasted Unit Cost in Phase 2 Application} - \text{Updated Unit Cost in progress report}}{\text{Initial Forecasted Unit Cost in Phase 2 Application}}$$

Where "Unit Costs" refers to the Average_Unit_Cost_per_Mile in Table 1

and also

CBR_Percentage_Difference calculated according to the following two scenarios:

a- Assuming the large electric corporation elects to use the Subproject designation and detailed Subproject data is not available, then this is calculated as the percentage difference between the Backcasted_Cost_Benefit_Ratio and updated Cost_Benefit_Ratio in the subsequent progress reports

$$\text{CBR\_Percentage\_Difference} = \frac{\text{Backcasted\_Cost\_Benefit\_Ratio} - \text{Updated Cost\_Benefit\_Ratio in the progress report}}{\text{Backcasted\_Cost\_Benefit\_Ratio}}$$

b- Assuming the large electric corporation elects not to use the Subproject designation or the detailed Subproject data is available in the Phase 2 Application, this is calculated as the percentage difference forecasted Cost_Benefit_Ratio submitted in the Phase 2 Application and the updated Cost_Benefit_Ratio presented in the subsequent progress reports

$$\text{CBR\_Percentage\_Difference} = \frac{\text{Cost\_Benefit\_Ratio in Phase 2 Application} - \text{Updated Cost\_Benefit\_Ratio in the progress report}}{\text{Cost\_Benefit\_Ratio in Phase 2 Application}}$$

These two fields provide insight into the extent to which the CBR and Unit Cost have deviated from their original forecasted values, allowing for a clearer assessment of project performance and cost-effectiveness over time.

In Table 1, for each RRU (or project)[22] there will be one row for the utility's Undergrounding mitigation and one separate row for each alternative.[23]

All the Post-Mitigation fields must be completed by the utility using Screen 2 data or more updated data if available in the utility's Phase 2 Application. If the utility has data for scoped projects that have passed Screen 3 at the time of submitting its Phase 2 Application, then it must use that data. These fields will be updated by the utility in six-month progress reports as Screen 3 data becomes available.

For each RRU (or project), there should be one row representing the utility's undergrounding mitigation and one row for each alternative mitigation. Since each of these mitigation programs must be evaluated using three separate discount rates scenarios, this results in a total of nine rows per RRU (or project).

Table 2: Capital Cost Breakdown

This table breaks down the Capital 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. Data may be submitted at the project level in the Phase 2 Application and at RRU level when RRUs are created as described above.

Table 3: Risk Model Change Tracker

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. Changes that include New Data Inputs to the Risk Model can include, but are not limited to, the addition of climate change variables or wildfire suppression related information. This allows us to compare current and previous risk models, risk scores and Costs across each of the six-month progress reports. 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 might be 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 the six-month progress reports, SPD created a template (Table 3) to track changes in each RRU (or Project) and how those changes would impact the calculation of risk from one risk model to the next. Table 3 collects data regarding changes in calculated risk, length, and name of each RRU (or Project), which utilities plan to include in its undergrounding projects. This enables analysis and comparison of data created across different risk models and supports comparison of such data across the six-month progress reports and even maybe among various proceedings where such data may be presented. Data

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[22] Data may be submitted at the project level in the initial Application and at RRU level in subsequent progress reports when RRUs are created as described at page 4-5. This requirement follows for any other location in these Guidelines that state "RRU (or Project)".

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

may be submitted at the project level in the Phase 2 Application and at RRU level when RRUs are created as described above. This table complements some of the information presented in Table C.7 of the Energy Safety Expedited Undergrounding Plan Guidelines.[24]

Table 4: HFTD and Associated Asset

This table documents low-risk associated assets mitigated alongside primary electric grid infrastructure due to operational constraints or interconnected systems.[25] It includes associated Costs, miles, and Total Mitigation Benefit 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 Total Mitigation Benefit, Capital Costs, and CBR of the proposed RRU (or Project).-Data may be submitted at the project level in the Phase 2 Application and at RRU level when RRUs are created as described above

Table 5: Financial Inputs

This table provides financial parameters and metrics required to calculate and evaluate risk mitigations, including discount rates, 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 6: Interruption Cost Estimate (ICE) Calculator Inputs

Since SB-884 requires undergrounding projects to be completed within the HFTD, the ICE Calculator inputs must be relevant only to the HFTD. The utility must also disaggregate their inputs according to HFTD and non-HFTD regions. This table provides inputs that can be integrated into the ICE Calculator 2.0 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. This table requires the utility to calculate the Electric_Reliability_Valuation_Residential and Electric_Reliability_Valuation_Non_Residential fields as a $/CMI value which is further used to calculate the monetized value of electric reliability consequence within the HFTD.[26]

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[24] Office of Energy Infrastructure Safety, 10-year Electrical Undergrounding Plan Guidelines, February 20, 2025, at C-12 – C-14.

[25] In Table 4, "low-risk" is defined as electric grid infrastructure assets whose risk level is below the "High-Risk Threshold" defined by Office of Energy Infrastructure Safety, 10-year Electrical Undergrounding Plan Guidelines, February 20, 2025, page 42.

[26] The calculation of Pre-mitigated and Post-mitigated Ignition and Outage Program Risk must include Pre-mitigated and Post-mitigated monetized values of electric reliability consequence, which must be calculated as a product of the $/CMI values from the Electric_Reliability_Valuation_Residential and Electric_Reliability_Valuation_Non_Residential fields in Table 6 and the following corresponding eight fields:

1. Ignition_Pre_Mitigated_Residential_Reliability_Consequences
2. Ignition_Pre_Mitigated_Non_Residential_Reliability_Consequences
3. Ignition_Post_Mitigated_Residential_Reliability_Consequences
4. Ignition_Post_Mitigated_Non_Residential_Reliability_Consequences

Table Relationships

The data template Guidelines uses three primary key fields, RRU_ID, OEIS_Project_ID, and Undergrounding_Alternative_Mitigations, to connect Tables 1, 2, and 4 and ensure data consistency. Every row in Tables 2 and 4 must correspond to a matching row in Table 1 using these fields. This structure supports accurate cost allocation, risk modeling, and asset tracking.
Table 3 uses RRU_ID and OEIS_Project_ID as its primary keys, which can be linked to Tables 1, 2, and 4 when tracking changes to risk models or asset definitions.

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5. Outage_Program_Pre_Mitigated_Residential_Reliability_Consequences
6. Outage_Program_Pre_Mitigated_Non_Residential_Reliability_Consequences
7. Outage_Program_Post_Mitigated_Residential_Reliability_Consequences
8. Outage_Program_Post_Mitigated_Non_Residential_Reliability_Consequences

Tables and Data Requirements

Table 1: Data Set

Field Name	Field Description	Field Value Constraints
RRU_ID	A unique value identifying the Risk Reporting Unit (RRU).[27]	VARCHAR (255)
OEIS_Subproject_ID	A unique value identifying the Subproject. This is the same value as found in the Energy Safety Guidelines. The utility must retain the same Subproject ID over time. New Subprojects must receive new Subproject IDs which have not been used for any previously submitted Subproject.	VARCHAR (255)
OEIS_Project_ID	A unique value identifying the Undergrounding Project. This is the same value as found in the Energy Safety Guidelines. OEIS_PROJECT_IDs must remain consistent over time and not be altered during updates.	VARCHAR (255)
Circuit_Segment_ID	A unique value identifying the Circuit Segment ID on which this Undergrounding Project was defined. This is the same value as found in the Energy Safety Guidelines. If the Circuit Segment changes, the Circuit_Segment_ID remains identified with the original Circuit Segment, at the point the OEIS_PROJECT_ID is created	VARCHAR (255)
QDR_Circuit_Segment_ID	If the Circuit Segment was included in the most recent Quarterly Data Report submission as part of the WMP process, list the name used in that report. This must be the same value as found in the Energy Safety Guidelines in Table C.6.	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	VARCHAR (255)

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[27] For more information 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. See also the discussion in R.20-07-013, Phase 4 Workshop 3, SPD Staff Proposal on Risk Mitigation Accountability Reports December 30 2024at 22.

Field Name	Field Description	Field Value Constraints
	code; Expense programs are defined at the workpaper.[28]	
Filings	List of all filing(s), including advice letters, where the RRU (or Project) is reported and a budget is requested including but not limited to a GRC application and Wildfire Mitigation and Catastrophic Events (WMCE) application.	TEXT
Customer_Count_Residential	Number of Residential customers served by the RRU (or Project)	INT
Customer_Count_Non_Residential	Number of Non-Residential customers served by the RRU (or Project)	INT
State_Legislative_District	State Legislative District of the service territory in which the RRU (or Project) is located.	VARCHAR (255)
Tranche_Level	The Tranche that includes the Assets or Systems that the Project[29] mitigates. Each Project can only mitigate the risk exhibited by Assets or Systems found in one Tranche. Tranches are the quintiles of Likelihood of Risk Event (LoRE) and Consequence of Risk Event (CoRE) for Wildfire Ignition Risk. 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 If the utility has presented an alternative approach to tranches via a whitepaper in a previous RAMP Proceeding, it must create a clear and concise shorthand for the structure of the tranches.[30]	VARCHAR (255)
Asset_System_List	List of the unique Assets and/or the unique Systems that exhibit risk, which is mitigated by the RRU(or Project).[31] This should include, but not limited to, the following examples: Isolatable Circuit Segments or Circuit	TEXT

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[28] D.24-05-064, Appendix A, Row 28.

[29] Projects or RRUs reported in the Phase 2 Application. For any Projects reported in the Phase 2 Application , the corresponding RRUs are presumed to fall within the same Projects' Tranches.

[30] 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 (See D.24-05-064 at 31).

[31] Asset is a retirement unit that exhibits risk, as defined by Federal Energy Regulatory Commission (FERC) Uniform System of Accounts (USOA). 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
	Segments, Poles and Spans. This field should also include the List of Associated Assets, if any, found in Table 4.	
Total_Circuit_Miles	Total number of pre-mitigated circuit miles included in the RRU (or Project).	REAL
Total_Circuit_Miles_UG	Total number of post-mitigated undergrounded circuit miles included in the RRU (or Project). This field only applies if Undergrounding_Alternative_Mitigations is listed as undergrounding mitigation.	REAL
Risk_Ranking	Ranking of the total pre-mitigated risk that is exhibited by the assets or systems that the RRU (or Project) mitigates (E.g., where the risk level of the assets or systems mitigated by the RRU (or Project) lies in comparison with risk level of the assets or systems mitigated by other RRUs (or Projects) across the entire Proposed Mitigation Program).	VARCHAR (255)
Scoping_Date	The year, month and day the utility intends to begin or did begin the scoping process of this mitigation for the RRU (or Project).	Date (YYYY-MM-DD)[32]
Start_Date	The year, month and day the utility intends to begin or did begin the construction or implementation of the RRU (or Project).	Date (YYYY-MM-DD)[33]
Undergrounding_Alternative_Mitigations	This field must include the Undergrounding Mitigation and the Alternative Mitigations that the utility has considered for this RRU (or Project). All the following risk and cost analyses are carried out based on the value inputted within this field.[34] This field enables comparison of risk and cost analyses of alternative mitigations and the proposed undergrounding program for the same RRU (or Project).	VARCHAR (255)
Undergrounding_Mitigation_Justification1	Primary reason for choosing the Undergrounding mitigation that the utility proposed for the RRU (or Project). This field can include, but is not limited to, responses such as project-level thresholds required in the Energy Safety EUP Guidelines: the High-Risk Threshold; the Ignition Tail Risk Threshold, the High Frequency Outage Program Threshold, operational limitations, cost	VARCHAR (255)

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

[33] If the day is not yet confirmed, the utility must use 01 for the day (i.e. 2025-02-01).

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

Field Name	Field Description	Field Value Constraints
	efficiency, and continuity.	
Undergrounding_Mitigation_Justification2	Other reasons for choosing the Undergrounding mitigation that the utility proposed for the RRU (or Project). This field can include, but is not limited to, responses such as project-level thresholds required in the Energy Safety EUP Guidelines: the High-Risk Threshold, the Ignition Tail Risk Threshold; the High Frequency **Outage** Program Threshold, operational limitations, cost efficiency, and continuity. If a utility does not have a secondary reason for choosing the Undergrounding mitigation the utility should leave this field blank.	VARCHAR (255)
Status	Preset domain values to identify the current status of the RRU (or Project) are:[35] - Scoping: Identifying the size and timeline of the RRU (or Project) Scoping is the first step to providing visibility to the construction feasibility and possible execution timing. Designing: Delineation of a plan for implementing the RRU (or Project) including determining the RRU's (or Project) integration within existing infrastructure or operations and need for materials, training, or permitting. The costs for completing the RRU (or Project), including for permitting, labor and materials, are forecasted at this stage. - Permitting: The process of obtaining the rights and permits from relevant stakeholders to implement the RRU (or Project). This stage of the lifecycle also includes negotiating of contracts to implement the RRU (or Project) as well as final estimation of the costs associated with implementing the RRU (or Project). - Construction/Implementation: 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.[36] - Post-Construction: For capital investments,	VARCHAR (255)

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[35] 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.

[36] The "Construction/Implementation" status value corresponds to the "Ready for Construction" and "Construction in Progress" values in table C-14 of the Energy Safety Guidelines.

Field Name	Field Description	Field Value Constraints
	there can be final paperwork and updates to asset registries after the scoped work is used and useful.[37]	
Used_and_Useful_Date	The year, month and day the utility intends to make or did make this RRU (or Project) used and useful. Used and useful means to be fully complete and providing service to customers.	Date (YYYY-MM-DD)[38]
CBR_Year_Zero	The year the risk and costs for the Undergrounding_Alternative_Mitigations program for the RRU (or Project) are discounted to.	INT
Useful_Life	The value of the useful life of the Undergrounding_Alternative_Mitigations program, represented as the number of years.	REAL
Ignition_Pre_Mitigated_Likelihood	The likelihood of Ignition before Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project).	REAL
Ignition_Pre_Mitigated_Safety_Consequences	The unscaled expected value of Safety Consequences of Ignition (e.g., injuries or fatalities) before the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Ignition_Pre_Mitigated_Residential_Reliability_Consequences	The unscaled expected value of Residential Reliability Consequences of Ignition (e.g., Customer minutes interrupted) before the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Ignition_Pre_Mitigated_Non_Residential_Reliability_Consequences	The unscaled expected value of Non-Residential Reliability Consequences of Ignition (e.g., Customer minutes interrupted) before Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Ignition_Pre_Mitigated_Financial_Consequences	The unscaled expected value of Financial Consequences of Ignition before the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL

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[37] The "Post-Construction" status value corresponds to the "Construction Completed" and "Overhead De-energized" values in table C-14 of the Energy Safety Guidelines.

[38] If the day is not yet confirmed, the utility must use 01 for the day (i.e. 2025-02-01).

Field Name	Field Description	Field Value Constraints
Ignition_Post_Mitigated_Likelihood	The likelihood of Ignition occurring after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project).	REAL
Ignition_Post_Mitigated_Safety_Consequences	The unscaled expected value of Safety Consequences of Ignition (e.g., injuries or fatalities) after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Ignition_Post_Mitigated_Residential_Reliability_Consequences	The unscaled expected value of Residential Reliability Consequences of Ignition (e.g., Customer minutes interrupted) after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Ignition_Post_Mitigated_Non_Residential_Reliability_Consequences	The unscaled expected value of Non-Residential Reliability Consequences of Ignition (e.g., Customer minutes interrupted) after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Ignition_Post_Mitigated_Financial_Consequences	The unscaled expected value of Financial Consequences of Ignition after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Outage_Program_Pre_Mitigated_Likelihood	The likelihood of Outage Program occurring before Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project).	REAL
Outage_Program_Pre_Mitigated_Safety_Consequences	The unscaled expected value of Safety Consequences of Outage Program (e.g., injuries or fatalities) before the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Outage_Program_Pre_Mitigated_Residential_Reliability_Consequences	The unscaled expected value of Residential Reliability Consequences of Outage Program (e.g., Customer minutes interrupted) before the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Outage_Program_Pre_Mitigated_Non_Residential_Reliability_Consequences	The unscaled expected value of Non-Residential Reliability Consequences of Outage Program (e.g., Customer minutes interrupted) before the Undergrounding_Alternative_Mitigations program is	REAL

Field Name	Field Description	Field Value Constraints
	applied to the assets or system associated with this RRU (or Project). (Natural Units)	
Outage_Program_Pre_Mitigated_Financial_Consequences	The unscaled expected value of Financial Consequences of Outage Program before the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Outage_Program_Post_Mitigated_Likelihood	The likelihood of Outage Program occurring after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project).	REAL
Outage_Program_Post_Mitigated_Safety_Consequences	The unscaled expected value of Safety Consequences of Outage Program (e.g., injuries or fatalities) after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Outage_Program_Post_Mitigated_Residential_Reliability_Consequences	The unscaled expected value of Residential Reliability Consequences of Outage Program (e.g., Customer minutes interrupted) after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project) (Natural Units)	REAL
Outage_Program_Post_Mitigated_Non_Resdiential_Reliability_Consequences	The unscaled expected value of Non-Residential Reliability Consequences of Outage Program (e.g., Customer minutes interrupted) after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project) (Natural Units)	REAL
Outage_Program_Post_Mitigated_Financial_Consequences	The unscaled expected value of Financial Consequences of Outage Program after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Natural Units)	REAL
Pre_Mitigated_Ignition_Risk	Unscaled value of Ignition Risk before the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Dollar Value)	REAL
Post_Mitigated_Ignition_Risk	Unscaled value of Ignition Risk after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Dollar Value)	REAL
Pre_Mitigated_Outage_Program_Risk	Unscaled value of Outage Risk before the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU	REAL

Field Name	Field Description	Field Value Constraints
	(or Project). (Dollar Value)	
Post_Mitigated_Outage_Program_Risk	Unscaled value of Outage Risk after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Dollar Value)	REAL
Pre_Mitigated_Overall_Utility_Risk	Unscaled value of Overall Utility Risk before the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Dollar Value)	REAL
Post_Mitigated_Overall_Utility_Risk	Unscaled value of Overall Utility Risk after the Undergrounding_Alternative_Mitigations program is applied to the assets or system associated with this RRU (or Project). (Dollar Value)	REAL
Discount_Rate_Scenario	The discount rate (See Table 5) used to calculate the Total_Mitigation_Benefit, Present_Value_Capital_Costs, and Cost_Benefit_Ratio, among others. Input in this field shall include one row for each of the following three discount rate scenarios: • WACC Discount Rate Scenario • Societal Discount Rate Scenario • Hybrid Discount Rate Scenario	VARCHAR (255)
Ignition_Risk_Mitigation_Benefit	Present Value of the Wildfire Ignition Risk Reduction from the Undergrounding_Alternative_Mitigations program for the RRU (or Project). (Dollar Value)	REAL
Outage_Program_Risk_Mitigation_Benefit	Present Value of the Outage Program Risk Reduction from the Undergrounding_Alternative_Mitigations program for the RRU (or Project). (Dollar Value)	REAL
Net_OM_Costs_PV	Present Value of Operations and Maintenance (O&M) Cost Savings minus Present value of O&M New Costs from the Undergrounding_Alternative_Mitigations program for the RRU (or Project). Utilities may include Present Value of Net O&M Costs[39] as part of the Total_Mitigation_Benefit in the CBR's numerator for the RRU (or Project). (Dollar Value)	
Total_Mitigation_Benefit	Present Value of the Risk Reduction and potentially the Present Value of Net O&M Costs from the Undergrounding_Alternative_Mitigations program for the RRU (or Project). (Dollar Value)	REAL

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[39] The CBR calculation shall only be based on the incremental difference between the proposed project and the No-Build Baseline, both in terms of benefits and net costs (Net O&M Costs). No-Build Baseline represents a well-defined baseline scenario or what happens if no project or RRU is implemented.

Field Name	Field Description	Field Value Constraints
Average_Unit_Cost_per_Mile	The average Unit Cost of the Undergrounding_Alternative_Mitigations program for the RRU (or Project) per mile.	REAL
Total_CapEx	Total nominal value of the Capital expenditures of the Undergrounding_Alternative_Mitigations program for the RRU (or Project).	REAL
Present_Value_Capital_Costs	Present Value of the Capital Costs (Total_CapEx) of the Undergrounding_Alternative_Mitigations program for the RRU (or Project).	REAL
Cost_Benefit_Ratio	Cost-Benefit Ratio of the Undergrounding and Alternative Mitigations for the RRU (or Project).	REAL
Backcasted_Total_Mitigation_Benefit	Recalculated Total_Mitigation_Benefit from the Undergrounding and Alternative Mitigations measure submitted in the Phase 2 Application based on the new inputs including but not limited to the RRU and/or new risk models and/or changes to the portion of the circuit scoped for mitigation (Dollar Value)	REAL
Backcasted_Present_Value_Capital_Costs	Recalculated Present_Value_Capital_Costs of the Proposed and Alternative Mitigations submitted in the Phase 2 Application based on the new inputs including but not limited to the RRU and/or new risk models and/or changes to the portion of the circuit scoped for mitigation (Dollar Value)	REAL
Backcasted_Cost_Benefit_Ratio	Recalculated Cost_Benefit_Ratio of the Undergrounding and Alternative Mitigations submitted in the Phase 2 Application based on the new inputs including but not limited to the RRU and/or new risk models and/or changes to the portion of the circuit scoped for mitigation (Dollar Value)	REAL
Unit_Cost_Percentage_Difference	The percentage difference between forecasted Average_Unit_Cost_per_Mile submitted in the Phase 2 Application and updated Unit Costs in the subsequent six-month progress reports.	REAL
CBR_Percentage_Difference	If the utility elects to use the Subproject designation, then this is calculated as the percentage difference between the Backcasted_Cost_Benefit_Ratio and the Cost_Benefit_Ratio presented in the subsequent six-month progress reports. If the utility elects not to use the Subproject designation or the detailed Subproject data is available in the Phase 2 Application this is calculated as the percentage difference between forecasted Cost_Benefit_Ratio submitted in the Phase 2 Application and the updated Cost_Benefit_Ratio presented in the subsequent six-	REAL

Field Name	Field Description	Field Value Constraints
	month progress reports.	
Risk_Model	Name and Version of Risk Model used to calculate Cost_Benefit_Ratio of the Undergrounding and Alternative Mitigations for the RRU (or Project).	VARCHAR (255)
Reporting_Date	The date, the risk and costs for the Undergrounding and Alternative Mitigations for the RRU (or Project) are reported.	Date (YYYY-MM-DD)
Calculated_Date	The date, the risk and costs for the Undergrounding and Alternative Mitigations for the RRU (or Project) are calculated.	Date (YYYY-MM-DD)

Table 2: Cost Breakdown

Field Name	Field Description	Field Value Constraints
RRU_ID	A unique value identifying the RRU.	VARCHAR (255)
OEIS_Subproject_ID	A unique value identifying the Subproject. This is the same value as found in the Energy Safety Guidelines. The utility must retain the same Subproject ID over time. New Subprojects must receive new Subproject IDs which have not been used for any previously submitted Subproject.	VARCHAR (255)
OEIS_Project_ID	A unique value identifying the Undergrounding Project. This is the same value as found in the Energy Safety Guidelines. PROJECT_IDs must remain consistent over time and not be altered during updates.	VARCHAR (255)
Undergrounding_Alternative Mitigations	This field must include the Undergrounding Mitigation and the Alternative Mitigations that the utility has considered for this RRU (or Project). All the following cost analyses are carried on based on the value inputted within this field. This field enables comparing risk analyses of several alternative mitigations' options for the same RRU (or Project). This value must be identical with the Undergrounding_Alternative_Mitigations field in Table 1.	VARCHAR (255)
CapEx_Labor	Including all the required Engineering, Design, and Construction.	REAL
CapEx_Materials	All the required material s.	REAL
CapEx_Permits_Environmental	Permitting fees from local and state agencies that cover, for instance, but not limited to, environmental impact assessments.	REAL
CapEx_Other_Costs	Other Capital Expenditure that are not categorized in the rows above.	REAL
Total_CapEx	Total nominal value of the Capital expenditures of the Undergrounding_Alternative_Mitigations for the RRU. This value must be equal to Total_CapEx fields in Table 1.	REAL
Initial_Application_Total_Costs	Total nominal value of the Total_CapEx of the Undergrounding_Alternative_Mitigations for the RRU (or Project) that was presented in the Phase 2 Application to the Commission. This field should remain blank when the utility submits its Phase 2 Application.	REAL
Reporting_Date	The date, the risk and costs for the Undergrounding and	Date (YYYY-

Field Name	Field Description	Field Value Constraints
	Alternative Mitigations for the RRU (or Project) are reported.	MM-DD)
Calculated_Date	The date the risk and costs for the Undergrounding and Alternative Mitigations for the RRU (or Project) are calculated.	Date (YYYY-MM-DD)

Table 3: Risk Model Change Tracker

Field Name	Field Description	Field Value Constraints
RRU_ID	A unique value identifying the RRU.	VARCHAR (255)
OEIS_Subproject_ID	A unique value identifying the Subproject. This is the same value as found in the Energy Safety Guidelines. The utility must retain the same Subproject ID over time. New Subprojects must receive new Subproject IDs which have not been used for any previously submitted Subproject.	VARCHAR (255)
OEIS_Project_ID	A unique value identifying the Undergrounding Project. This is the same value as found in the Energy Safety Guidelines. PROJECT_IDs must remain consistent over time and not be altered during updates.	VARCHAR (255)
Current_Asset_System_List	List of current unique Assets and/or the unique Systems that exhibit risk, which is mitigated by the RRU (or Project). The list in this field must be the same as the list in the Asset_System_List field in Table 1. This should include, but not limited to, the following examples: This should include, but not limited to, the following examples: Isolatable Circuit Segments or Circuit Segments, Poles and Spans	TEXT
Current_Risk_Model	Name and Version of the updated Risk Model used to calculate the risk score for the assets mitigated by the RRU (or Project). (E.g., V2)	VARCHAR (255)
Current_Total_Miles	Total circuit miles under Current Risk Model for the RRU (or Project). This must be the same as the Total_Circuit_Miles in Table 1.	VARCHAR (255)
Current_Non_HFTD_Miles	Total miles (if any) that extend beyond the High Fire-Threat District (HFTD) under Current Risk Model for the RRU	VARCHAR (255)

Field Name	Field Description	Field Value Constraints
	(or Project).	
Current_Pre_Mitigated_Overall_Utility Risk_Score	The pre-mitigated risk score for the assets mitigated by the RRU (or Project) calculated under the Current Risk Model. (Dollar Value). This must be the same as the Pre_Mitigated_Overall_Utility_Risk field presented in Table 1.	VARCHAR (255)
Current_Risk_Percentage	The Pre_Mitigated_Overall_Utility_Risk risk score for the assets mitigated by the RRU (or Project) divided by the total risk score calculated using the Current Risk Model.	VARCHAR (255)
Change_Type	Identification of how the circuit segment or partial circuit segment mitigated by the RRU has been defined and redefined since the last update: • New Data Inputs to Risk Model • New Construction of the circuit segment or partial circuit segment • Renaming of the circuit segment or partial circuit segment • Splitting of the circuit segment or partial circuit segment • Merging of the circuit segment or partial circuit segment • Other	VARCHAR (255)
Change_Date	Date the Change_Type was implemented on the RRU (or Project).	Date (YYYY-MM-DD)
Previous_Asset_System_List	For each RRU (or Project), if the value in the Change_Type field in this Table is one of the following: • New Construction of the circuit segment or partial circuit segment • Renaming of the circuit segment or partial circuit segment • Splitting of the circuit segment or partial circuit segment	TEXT

Field Name	Field Description	Field Value Constraints
	Merging of the circuit segment or partial circuit segment Then list the unique Assets and/or the unique Systems mitigated by the RRU(or Project), prior to the Change_Date. This should include, but not limited to, the following examples: Isolatable Circuit Segments or Circuit Segments, Poles and Spans	
Previous_Risk_Model	Name and Version of the previous Risk Model used to calculate the risk score for the assets mitigated by the RRU (or Project).	VARCHAR (255)
Previous_Total_Miles	Total circuit miles under the Previous Risk Model for the RRU (or Project).	VARCHAR (255)
Previous_Non_HFTD_Miles	Total miles (if any) that extend beyond the High Fire-Threat District (HFTD) under Previous Risk Model for the RRU (or Project).	VARCHAR (255)
Previous_Pre_Mitigated_Risk_Score	The pre-mitigated risk score for the assets mitigated by the RRU (or Project) calculated under the Previous Risk Model. (Dollar Value)	VARCHAR (255)
Previous_Risk_Percentage	The pre-mitigated risk score for the assets mitigated by the RRU (or Project) divided by the total risk score calculated using the Previous Risk Model.	VARCHAR (255)
Initial_Application_Total_Miles	Total number of circuit miles included in the RRU (or Project) from the Phase 2 Application to the Commission. Even if the total circuit miles do not change in a six-month progress report, this value must still be entered.	REAL
Initial_Application_Non_HFTD_Miles	Total miles (if any) that extend beyond the High Fire-Threat District (HFTD) for the RRU (or Project) from the Phase 2 Application to the Commission. Even if the total circuit miles do not change in a six-month progress report, this value must still be entered.	REAL

Field Name	Field Description	Field Value Constraints
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

Field Name	Field Description	Field Value Constraints
RRU_ID	A unique value identifying the RRU.	VARCHAR (255)
OEIS_Subproject_ID	A unique value identifying the Subproject. This is the same value as found in the Energy Safety Guidelines. The utility must retain the same Subproject ID over time. New Subprojects must receive new Subproject IDs which have not been used for any previously submitted Subproject.	VARCHAR (255)
OEIS_Project_ID	A unique value identifying the Undergrounding Project. This is the same value as found in the Energy Safety Guidelines. PROJECT_IDs must remain consistent over time and not be altered during updates.	VARCHAR (255)
Undergrounding_Alternative_Mitigations	This field must include the Undergrounding Mitigation and the Alternative Mitigations that the utility has considered for this RRU (or Project). All the following cost and risk analyses are carried on based on the value inputted within this field. This field enables comparing risk analyses of several alternative mitigations' options for the same RRU (or Project). This value must be identical with the Undergrounding_Alternative_Mitigations field in Table 1.	VARCHAR (255)
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
HFTD_Tier2_Miles	If applicable, the total number of miles included in the RRU (or Project) located in HFTD Tier 2.	REAL
HFTD_Tier3_Miles	If applicable, the total number of miles included in the RRU (or Project) located in HFTD Tier 3.	REAL
Wildfire_Rebuild_Miles	If applicable, the total number of miles included in the RRU (or Project) located in the Wildfire Rebuild Area.	REAL
Associated_Asset_Miles	Total associated asset miles included in the RRU (or Project) that the utility plans to mitigate.	REAL

Field Name	Field Description	Field Value Constraints
Discount_Rate_Scenario	The discount rate (See Table 5) used to calculate the Associated_Assets_Total_Mitigation_Benefit, and Associated_Assets_Present_Value_Capital_Costs, among others. Input in this field should be one of the following: • WACC Discount Rate Scenario • Societal Discount Rate Scenario • Hybrid Discount Rate Scenario	VARCHAR (255)
Associated_Assets_Present_Value_Capital_Costs	The Present Value of Capital Costs of the Undergrounding and Alternative Mitigations for all of the Associated Assets that the utility plans to mitigate.	REAL
Associated_Assets_Total_Mitigation_Benefit	The Present Value of the Risk Reduction and possible Present Value of Net O&M Costs of the Undergrounding_Alternative_Mitigations for all of the Associated Assets that the utility plans to mitigate.	REAL
Reporting_Date	The date the risk and Costs for the Undergrounding_Alternative_Mitigations for the RRU (or Project) are reported.	Date (YYYY-MM-DD)
Calculated_Date	The date the risk and costs for the Undergrounding_Alternative_Mitigations for the RRU (or Project) are calculated.	Date (YYYY-MM-DD)

Table 5: Financial Inputs

Field Name	Field Description	Field Value Constraints
WACC_Discount_Rate	The Weighted Average Cost of Capital (WACC) Discount Rate Scenario the utility must use to calculate Present Value Benefits and Costs component of the CBR for an RRU (or Project).[40]	REAL
Societal_Discount_Rate	The Societal Discount Rate Scenario the utility must use to calculate the Present Value of Benefit and Costs component of the CBR for an RRU (or Project).[41]	REAL

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[40] D.24-05-064 at 103.

[41] D.24-05-064 at 102-103.

Field Name	Field Description	Field Value Constraints
VSL	Dollar value of statistical life used to monetize the Safety Consequence.[42]	REAL
Financial	Dollar value used to monetize the Financial Consequence, and it equals to $1.	REAL
PVRR	If applicable, 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. Providing the PVRR is optional.	REAL
ICE_Calculator_Version	The ICE Calculator version that utility uses to estimate dollar value per customer minute interrupted	REAL
Reporting_Date	The date the Financial Inputs are reported	Date (YYYY-MM-DD)
Calculated_Date	The date the financial Inputs are calculated	Date (YYYY-MM-DD)

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[42] D.22-12-027, OP 2a.

Table 6: Interruption Cost Estimate Calculator Inputs[43]

Field Name	Field Description	Field Value Constraints
HFTD_Region	Interruption Cost Estimate calculator inputs broken down by HFTD and Non-HFTD. Acceptable values are: • HFTD • Non-HFTD	VARCHAR (255)
Affected_Customers_Residential	Total number of residential customers affected by risk events by HFTD_Region	REAL
Affected_Customers_Non_Residential	Total number of non-residential customers affected by risk events by HFTD_Region	REAL
Average_Annual_Usage_Residential	Average annual electricity usage in kilowatt-hours for residential customers by HFTD_Region	REAL
Average_Annual_Usage_Non_Residential	Average annual electricity usage in kilowatt-hours for non-residential customers by HFTD_Region	REAL
Residential_BUG	Percentage of residential customers with backup generation by HFTD_Region	REAL
Residential_work_from_Home	Percentage of residential customer working from home by HFTD_Region	REAL
Non_Residential_Manufacturing	Percentage of non-residential customers engaged in manufacturing by HFTD_Region	REAL
Non_Residential_Health_Social	Percentage of non-residential customers engaged in health care and Social Assistance by HFTD_Region	REAL
Outage_Summer	Percentage of outages occurring in the Summer, from June through September by HFTD_Region	REAL
Outage_Weekend	Percentage of outages occurring at the weekend by HFTD_Region	REAL
Non-Residential_Advanced_Warning	Percentage of customers with advanced warning of an outage by	REAL

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[43] D.22-12-027, OP 2b.

Field Name	Field Description	Field Value Constraints
	HFTD_Region	
SAIDI	System Average Interruption Duration Index by HFTD_Region. 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 by HFTD_Region. It is calculated by dividing the total number of customer interruptions by the total number of customers served.	REAL
Electric_Reliability_Valuation_Residential	The Residential dollar value per customer minute interrupted as estimated by the Interruption Cost Estimate Calculator for each **HFTD_Region.**	REAL
Electric_Reliability_Valuation_Non_Residential	The Non-Residential dollar value per customer minute interrupted as estimated by the Interruption Cost Estimate Calculator by **HFTD_Region.**	REAL
Reporting_Date	The date the ICE Calculator Inputs are reported	Date (YYYY-MM-DD)
Calculated_Date	The date the ICE Calculator Inputs are calculated	Date (YYYY-MM-DD)