R.20-07-013, Phase 3, Workshop #6: Pre-Workshop Planning Questions

November 15, 2023

Tail Risk: Non-Wildfire Risks

Description of the Issue:

At present, the Risk-based Decision-making Framework (RDF) provides utilities with the flexibility to select their own approach to addressing tail risk in their risk models.¹ This part of the workshop will primarily address Phase 3 Scoping Memo issue (c)(2), namely: is additional Commission guidance needed regarding modeling of low probability, high risk events more generally in the RDF and in Risk Assessment and Mitigation Phase (RAMP) filings? As such, presentations and discussions in this area will focus primarily on non-wildfire risks, which were not fully discussed during Workshop #2. Southern California Edison Company (SCE) and/or one of the Sempra companies (San Diego Gas & Electric Company or Southern California Gas Company) will present a proposal on this topic during Workshop #6.

Planning Questions:

- 1. How have past catastrophic incidents shaped the risk assessments currently required by the RDF today?
- 2. Other than wildfire, what risks do the utilities face that exhibit the characteristics of low probability but high consequence risk events? Do the utilities treat these risks similar to wildfire risks?
- 3. How have tail risk thresholds been established for risks other than wildfire? What statewide and/or industry best practices are available to help us understand the impact of tail risk?
- 4. Can power law be used to address the tail risk associated with non-wildfire risks? If so, how? If not, why not? If not, what are the other statistical approaches and/or tools best used to address these non-wildfire tail risks?
- 5. Are there alternative approaches for appropriately addressing tail risk?
- 6. In what cases would it be appropriate to use a value other than an expected value for the purpose of establishing cost benefit ratios?
- 7. Should the Commission update the current RDF guidance regarding presentation of tail risks in the RAMP? Why/why not?

¹ D.22-12-027 at Appendix A, A-14 (row 24) states that if a "utility chooses to present Alternative Analysis of monetized pre- and post-mitigation [consequences of risk event] CoRE using a computation in addition to the expected value of the Cost-Benefit Approach, such as tail value, it does so without prejudice to the right of parties to the RAMP or GRC to challenge such Alternative Analysis."

Granularity of Tranches

Description of the Issue:

The RDF currently requires the utilities to subdivide the group of assets or the system associated with a given risk event into tranches. The risk reduction from mitigations and the cost-benefit ratio of a mitigation are required to be reported at the tranche level to provide decisionmakers with a granular view of how investments in mitigations will reduce risk.² This section of the workshop will focus on the possible need for additional Commission guidance regarding the granularity of tranches used in the RDF and presented in RAMP and/or GRC filings, for both test years and post-test years. The Utility Reform Network (TURN) will briefly present its tranche granularity proposal at Workshop #6. Investor-owned utilities (IOUs) should come prepared to, at minimum: (a) discuss scenarios where TURN's proposal would not be workable; and (b) offer modifications or alternative proposals that include defining a minimum level of granularity (which could vary across mitigation types or risk areas).

Planning Questions:

- 1. How does each utility consider assets in their enterprise risk model versus any operational or planning risk model relied on by the utility? In each model are the utilities considering assets at a different level of granularity? Please describe.
- 2. In previous RAMP filings, how many tranches of assets did utilities provide for each risk identified? Which risks have become more granular over time to reflect different risk levels? How do utilities generally determine tranche size?
- 3. For which risks does the utility have a granular risk prioritization model (e.g. gas pipeline, wildfire, etc.)? For these risks, how does the number of tranches in the operational model compare to the number of tranches in the enterprise risk model (RSE calculations)?
- 4. What are the benefits of utilities providing "sufficiently granular" tranches in a RAMP filing? Are there any downsides?
- 5. What is lost and what are the impacts if a utility does not provide information at as granular level as possible?
- 6. Should the Commission provide additional guidance regarding tranche granularity in the RDF? Why/why not?
- 7. What are the benefits of providing additional guidance for the minimum number of tranches presented by the utility in a RAMP filing?
- 8. What are the drawbacks to identifying the minimum number of tranches to be presented by the utility in a RAMP filing?
- 9. If additional requirements for granularity of assets are adopted, is there any reason to allow deviation from the adopted requirements? If yes, under what circumstances should the application of the tranche requirements be lifted?

² D.22-12-027 at Appendix A, A-13 (row 14) states that the "determination of Tranches will be based on how the risks and assets are managed by each utility, data availability and model maturity, and strive to achieve as deep a level of granularity as reasonably possible. The rationale for the determination of Tranches, or for a utility's judgment that no Tranches are appropriate for a given Risk Event, will be presented in the utility's RAMP submission. For the purposes of the risk analysis, each element (i.e., asset or system) contained in the identified Tranche would be considered to have homogeneous risk profiles (i.e., considered to have the same LoRE and CoRE)."