Rulemaking (R.) 20-07-013: Phase II

Technical Working Group Meeting #1
April 20, 2022

10:00 AM - 3:30 PM

California Public
Utilities Commission

PURPOSE & EXPECTED OUTCOMES OF THIS TWG & RELATIONSHIP TO SCOPING MEMO

Purpose of Meeting & Expected Outcomes

Purpose:

The purpose of this Technical Working Group (TWG) session is to provide a forum for all parties discuss the pros and cons of Level 4's recommendations.

Expected Outcome:

- Workshop attendees will have a better understanding of the refined recommendations in the Level 4 Recommendations Report.
- Attendees will determine what elements of the risk-based decision-making framework should be standardized and in what order of priority.
- Future TWG sessions will be used to develop the details of implementation.

R.20-07-013, Phase II Scoping Memo (cont.)

- This Phase II Scoping Memo extends the statutory deadline in this proceeding until December 31, 2023.
- The issues to be determined or otherwise considered in Phase II are:

1) Should the Commission consider revising the RDF adopted in D.18-12-014? What principles or factors should guide consideration of revisions, refinements or clarifications?
2) Should the Commission consider revising or refining the RDF methodology for valuing services, mitigations and/or impacts (such as those related to reliability or safety)? If so, should the Commission consider: (a) defining and requiring use of a consistent value of statistical life (VSL); (b) whether the dollar value of attributes should be explicitly addressed; and (c) the valuation of the costs and impacts of public safety power shutoff (PSPS) events as both risks and risk mitigations? Discussion and consideration of PSPS related issues in this proceeding should avoid duplicating work on PSPS issues being addressed in other proceedings or as undertaken by the Office of Energy Infrastructure Safety (Energy Safety) in the context of its review of utility Wildfire Mitigation Plans.

R.20-07-013, Phase II Scoping Memo (cont.)

3) Should the Commission consider refining or revising the methodology adopted in D.18-12-014 regarding weighting of risk categories and/or the replacement of weights and ranges with direct trade-off values of services and impacts?
4) Should the Commission consider refining or revising the requirements for the multi-attribute value function (MAVF) contained in the RDF? If so, should this include identifying best practices, minimum requirements including, potentially, the development of a single risk-attitude function or scaling function), guiding principles, and/or aspirational characteristics for RAMP filings?
5) Should the Commission consider requirements, methods, milestones and timeframes to develop comparable risk scores and/or comparable risk spend efficiency scores across IOUs?
6) Should the Commission consider methods and requirements for incorporating climate change related risks, such as those associated with wildfires and rising sea levels, into the RDF, consistent with adaptation and resiliency efforts underway in R.18-04-019 and other proceedings?

R.20-07-013, Phase II Scoping Memo (cont.)

7) Should the Commission consider impacts on environmental and social justice communities, including the extent to which action in this proceeding impacts achievement of any of the nine goals of the Commission's Environmental and Social Justice Action Plan?

Level 4 Recommendations

Level 4 Recommendations: MAVF 1

- Individual risk events should be modeled at an appropriate level of granularity for the analysis (circuit, tranche, etc.) using probabilistic (stochastic) models and storing those results. The MAVF should then be applied as part of the consolidation process for those individual risk events.

Level 4 Recommendations: MAVF 2

- With input from the parties involved, the CPUC should adopt a standard set of parameters/formulas to monetize risk consequences, using standard values from other government agencies or industry sources where possible.

Level 4 Recommendations: MAVF 3

- With input from the parties involved, the CPUC should adopt standard metrics for electric and gas reliability, possibly adjusted for regional characteristics, and all IOUs should then use those metrics when estimating MAVF scores.

Level 4 Recommendations: Risk Modeling 1

- With input from the parties involved, and building from prior work by industry recognized sources such as the Gas Technology Institute, and Canadian Energy Regulator, and the Electric Power Research Institute, the CPUC should adopt a standard taxonomy of risks to be used by all of the IOUs for RSE modeling.

Level 4 Recommendations: Risk Modeling 2

- With input from the parties involved, the CPUC should adopt a standardized list of mitigation activities (for example, undergrounding power lines) and define a standard time horizon for the assumed effectiveness of each mitigation. All IOUs should then use this standardized list of mitigation activities and time horizons for RSE modeling.

Level 4 Recommendations: Risk Modeling 3

- With input from the parties involved, the CPUC should adopt a standard readability factor to be used for RSE calculations.

Level 4 Recommendations: Risk Modeling 4

- With input from the parties involved, the CPUC should adopt a standard discount rate to be used when discounting risk related costs and benefits of various categories for RSE modeling.

Level 4 Recommendations: Risk Modeling 5

- With input from the parties involved, the CPUC should adopt standard templates for each of the standard risks. As a minimum, these templates should include input assumptions, intermediate variables, and MAVF attribute values.

Level 4 Recommendations: Risk Modeling 6

- With input from the parties involved, the CPUC should adopt standardized bow ties and influence diagrams for the standard list of risks.

Level 4 Recommendations: Risk Modeling 7

- With input from the parties involved, the CPUC should adopt a standard cross platform nomenclature that represents the uncertainties, interrelationships and sensitivities of risks and their mitigations as stochastic libraries. While the IOUs may continue to use internally selected tools and models, the IOUs should be required to report RSE results using this nomenclature.

Level 4 Recommendations: Risk Modeling 8

- With input from the parties involved, the CPUC should adopt a standard list of risk statistics for use in RSE modeling. These statistics should maximize the use of public or pooled sources of data and standardized values from industry associations and other government agencies. All IOUs should then use these standardized statistics in their RSE modeling.

Level 4 Recommendations: Risk Modeling 9

- With input from the parties involved, the CPUC should adopt a standard risk relationship model identifying known or assumed dependencies between risk items in the standard risk taxonomy. The IOUs should then use this relationship model during RSE modeling.

Level 4 Recommendations: Wildfire/PSPS 1

- The CPUC should commission an independent parametric cost-benefit analysis of PSPS events. This study should identify relevant input parameters, equations, and criteria to be used for trigger events.

Level 4 Recommendations: Wildfire/PSPS 2

- The CPUC should work with others, including in particular the OEIS, to obtain an updated High Fire Threat District (HFTD) map to 1) increase its granularity, 2) account for fuel changes that have taken place since the map was created, and 3) account for the effects of climate change on wildfire size and consequence. An updated HFTD map should be generated using a single analytical approach across the entire state, and then used by all IOUs for RSE modeling.

Level 4 Recommendations: Wildfire/PSPS 3

- With input from the parties involved, including in particular the OEIS, the CPUC should adopt a requirement that RSE related wildfire modeling include the consequences of long-duration utility-caused wildfires, in addition to their current assessment of short-duration fires.

Level 4 Recommendations: Wildfire/PSPS 4

- With input from the parties involved, including in particular the OEIS, the CPUC should adopt a standard wildfire risk type classification, which should then be used by all IOUs for RSE modeling.

Level 4 Recommendations: Wildfire/PSPS 5

- With input from the parties involved, including in particular the OEIS, the CPUC should adopt one or more out-year fuelscapes supporting long-term assessments of risk priorities under various scenarios. All IOUs should then use these fuelscapes for RSE modeling.

Level 4 Recommendations: RSE Process 1

- IOUs shall be able to submit exception requests to the CPUC to cover circumstances that are not covered by the standards defined as part of these recommendations, and the CPUC shall have the authority to approve those exception requests.

Level 4 Recommendations: RSE Process 2

- The standards adopted herein should be periodically updated. The quantity, significance, and specifics for exception requests should be one input to the update process.

Next Steps

Schedule for Upcoming Activities in R.20-07-013, Phase II

- April 14: Circulate Level 4 Recommendations Report to Parties
- April 20: Technical Working Group #1
- April 26: Technical Working Group #2 (if needed)
- May 2: Informal Written Comments on Level 4 Recommendations Due.
- April – July: Additional TWGs
- August 2022: Staff Proposal

* Dates are subject to change.