

R.20-07-013, Phase III, Workshop 4
TURN Recommendation for the Adoption of a Risk Neutral Risk Attitude

The Risk-Based Decision-Making Framework (RDF) requires the utility to adopt a risk attitude.¹ As defined by the RDF, risk attitude is defined as “[a] function or formula applied to Monetized Levels of an Attribute to express the attitude towards uncertainty.”²

The three options for risk attitude are risk seeking, risk neutral and risk averse, and the choice of risk attitude will have an impact on the mitigations chosen by the cost benefit approach as well as the overall budgets for mitigation work proposed by the utility. As described in the RDF, “The Risk Attitude Function can be linear or non-linear. For example, the Risk Attitude Function is linear to express a risk-neutral attitude if avoiding a given change in the Monetized Attribute Level does not depend on the Attribute Level. Alternatively, the Risk Attitude Function is non-linear to express a risk-averse or risk-seeking attitude if avoiding a given change in the Monetized Attribute Level differs by the Attribute Level.”³ Ultimately, since the risk attitude expresses the “attitude towards uncertainty,” risk aversion reflects the avoidance of uncertainty, not the attitude towards avoiding bad outcomes.

TURN recommends, as it did in the previous phase of this proceeding, that the California IOUs should act as risk-neutral decision makers. TURN proposes that the CPUC require this of the IOUs.⁴ Consistent with the direction provided in advance of this workshop, that the topic of discussion be changes in intervenor positions on the issue, TURN offers only a summary of the many justifications for the risk neutral risk attitude it has previously provided to the Commission in this proceeding.

- The central question is whose risk attitude is being expressed. The California IOUs are regulated monopolies and it is the interests of the ratepayers and the general public that are relevant. The IOUs are spending ratepayer money, so the risk attitude should reflect the ratepayer’s position. There is no reason to believe that the people of California, or a single utility’s ratepayers, can be characterized as having a single attitude toward risk. Risk attitude is personal and variable. Some ratepayers will be risk seeking, other will be risk averse and some may be risk neutral. To address the difficulty of determining the risk attitude of a group as large as the California public or even a single utilities’ ratepayers, TURN argues that the risk attitude should reflect the attitude toward risk of the people of California with respect to the operations of an IOU.⁵
- Adoption of a risk-averse attitude by IOUs introduces a bias that makes mitigations appear more valuable than they otherwise would be if they were evaluated risk-neutrally.

¹ D.22-12-027, Appendix A, RDF, Line 7 (emphasis added).

² RDF, p. A-4.

³ RDF, line 7.

⁴ TURN Post PHC Statement and Reply Comments on Assigned Commissioner and ALJ’s Ruling Issuing Phase III Roadmap, R.20-07-013 (CPUC Apr 21, 2023), p. 5-6.

⁵ Comments of TURN on Phase II Staff Proposal, R.20-07-013 (CPUC Aug, 29, 2022), p. 5-6; TURN Informal Comments on Level 4 Report, R.20-07-013 (CPUC Mar 17, 2023) p. 7.

It is important not to confuse risk-aversion with aversion to bad outcomes.⁶ Every investor-owned utility is averse to a bad outcome and would spend money to avoid a bad outcome as a matter of public interest. Risk aversion measures how much one is willing to pay above the expected cost to avoid an uncertain situation.

- Adoption of a risk-averse attitude can imply preferences that are illogical.⁷ In the case of the financial and safety attributes, adopting a risk averse risk attitude suggests that not every dollar and not every life is valued equally. For example, TURN Witness Jonathan Lesser demonstrated that in its most recent GRC, PG&E’s scaling function values the reduction of 11 fatalities to 10 fatalities more than a reduction from 1 fatality to no fatalities.⁸ TURN shares PG&E’s desire to avoid catastrophic events, but adopting a risk averse risk attitude will create the unreasonable result where fatalities will not have equal risk scores.
- A risk neutral risk attitude simplifies analysis. Analysis of the mitigation portfolios will be far more transparent, easier to modify, easier to check, easier to explain, easier to defend.⁹

Adopting a risk neutral attitude, does not mean that the utility or ratepayer does not want to avoid the bad event, instead “[a] linear scaling function still recognizes the adverse consequences from additional deaths or financial damage. With a linear scaling function, each additional death has the same adverse consequence and each additional dollar of damage has the same value.”¹⁰ TURN recommends the utilities rely on a risk neutral risk attitude: every life should be equally valuable and every dollar should equal a dollar.

Risk aversion will not adequately capture the utility desire to avoid a bad outcome impacting a particular community or concern. If there is a particular concern or outcome that the Commission seeks to capture, the better approach to reflect that concern in the RDF is by the adoption of additional attributes.¹¹ For example, if the utility is concerned about potential impact on disadvantaged communities, it cannot be captured through the risk attitude, instead an additional attribute should be adopted to capture that concern. For example, ESJ could be treated as another attribute in the RDF.

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⁶ TURN Informal Comments on Level 4 Report, R.20-07-013 (CPUC Mar 17, 2023) p. 7.

⁷ Comments of TURN on Phase II Staff Proposal , Attachment A, TURN-02, Prepared Testimony of Jonathan Lesser Addressing Quantitative Risk Analysis Issues, A.21-06-021 (CPUC June 13, 2022), p.28-29.

⁸ *Id.*

⁹ TURN Informal Comments on Level 4 Report, R.20-07-013 (CPUC Mar 17, 2023) p. 7.

¹⁰ Comments of TURN on Phase II Staff Proposal , Attachment A, p. 30.

¹¹ See discussion of the development of the MAVF in the Joint Intervenor Approach Test Drive. TURN Post PHC Statement and Reply Comments on Assigned Commissioner and ALJ’s Ruling Issuing Phase III Roadmap, R.20-07-013 (CPUC Apr 21, 2023), Attachment A, p. 10-15.