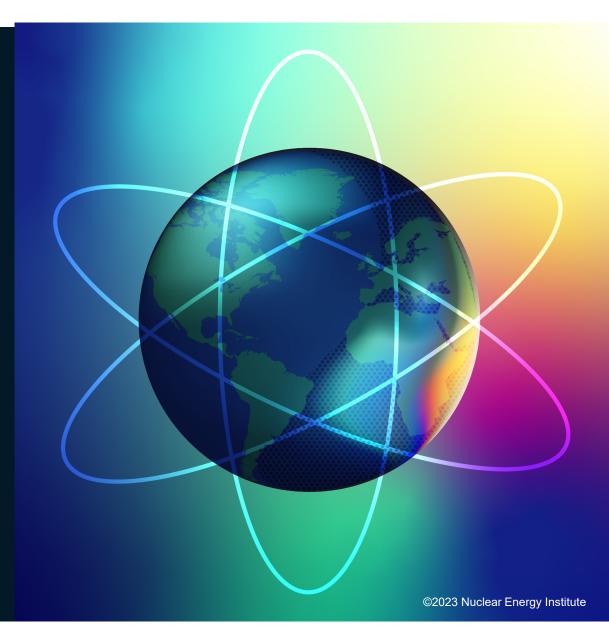


NRC Public Meeting on Risk-Informed Process for Evaluations

Andrew Mauer Sr. Director, Regulatory Affairs

Victoria Anderson Technical Advisor, Engineering and Risk



July 11, 2023

Overview



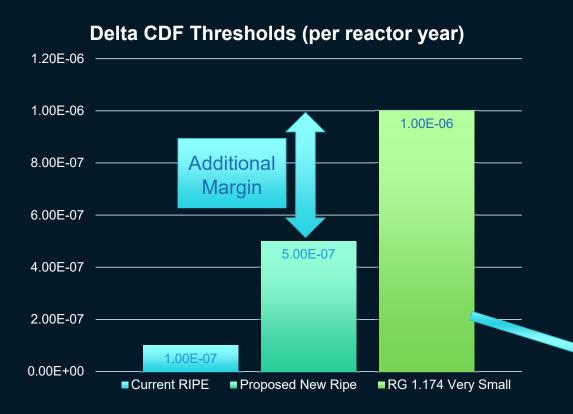
- RIPE process was approved by the NRC in January 2021
- RIPE process was used successfully in in January 2022
- The risk thresholds were initially set very low
 - Order of magnitude below NRC's definition of very low safety significance issues within the Reactor Oversight Process
 - The time is right to review the risk screening metrics, especially given that NRC will be reviewing any licensing action under RIPE
- NEI's April 19, 2023 letter recommended adjustments to the RIPE risk thresholds

RIPE Risk Thresholds Should be Adjusted

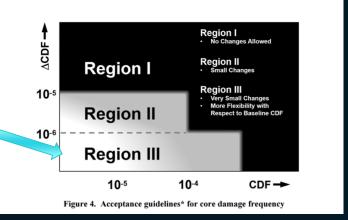


- Current thresholds in Section 2 of TSG-DORL-2021-01 are unnecessarily low
 - The issue contributes less than 1E-7/year to core damage frequency (CDF)
 - The issue contributes less than 1E-8/year to large early release frequency (LERF)
- NEI recommends the following adjustments:
 - The issue contributes less than 5E-7/year to core damage frequency (CDF)
 - The issue contributes less than 5E-8/year to large early release frequency (LERF)
- These adjusted risk thresholds are one half of the very small change acceptance guidelines given in RG 1.174 (1E-7/year change in CDF, 1E-8/year change in LERF)

RIPE Risk Thresholds Should be Adjusted



This is the region in which a detailed quantitative assessment of the base values of CDF and LERF is not necessary for RG 1.174 applications, indicating that the NRC finds such changes to be acceptably low in risk provided the other principles are met



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RIPE Risk Thresholds Should not be Pass/Fail



- A bright line approach to risk thresholds is inconsistent with NRC's risk-informed decision making philosophy
- Section 2.5 of RG 1.174, states, "In the context of integrated decision making, the acceptance guidelines should not be interpreted as being overly prescriptive. They are intended to give a numerical indication of what is considered acceptable. The lines between the regions are intentionally blurry to indicate that the NRC has discretion when making licensing decisions involving the risk acceptance guidelines"