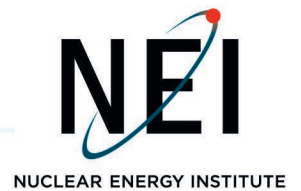


ANDREW N. MAUER
Sr. Director, Regulatory Affairs

1201 F Street, NW, Suite 1100
Washington, DC 20004
P: 202.739.8018
anm@nei.org



April 19, 2023

Ms. Andrea Veil
Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: NEI Feedback on Risk-Informed Process for Evaluations

Project Number: 689

Dear Ms. Veil,

On behalf of our members, the Nuclear Energy Institute (NEI)¹ offers our feedback regarding the Nuclear Regulatory Commission's (NRC) Risk-Informed Process for Evaluations, or RIPE. The industry appreciates the NRC staff's creation of the process which facilitates resolving issues of very low safety significance efficiently, consistent with the Principles of Good Regulation.

The RIPE process has been used successfully in one case in January 2022, and the process was modified to accommodate changes to technical specifications. Since that time, our members have explored additional opportunities to use RIPE and they have determined that certain issues of inherently very low safety significance are often not well suited to quantitative modeling in a traditional probabilistic risk assessment (PRA). The industry appreciated the dialogue at the April 12, 2023 public meeting with NEI's Regulatory Issues Task Force and looks forward to further engagement with the NRC on an approach for issues not well suited to quantitative modeling in a PRA, where a thorough and qualitative assessment of risk can be performed which would give the NRC confidence that an issue is of very low safety significance. Additionally, NEI continues to believe that the risk screening metrics have been set unduly low given that NRC will be reviewing the license amendment. In fact, the thresholds identified in NRR's Temporary Staff Guidance for RIPE (TSG-DORL-2021-01) are an order of magnitude below NRC's definition of very low safety significance issues within the Reactor Oversight Process. We offer the following recommendations to increase the frequency of use of the RIPE process:

¹ The Nuclear Energy Institute (NEI) is the organization responsible for establishing unified industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations and entities involved in the nuclear energy industry.

- 1) The risk criteria in Section 2 of TSG-DORL-2021-01 should be revised as follows:

For RIPE, all the following must apply in order to characterize an issue as having a minimal safety impact:

- The issue contributes less than 5×10^{-7} /year to core damage frequency (CDF).
- The issue contributes less than 5×10^{-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, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis." 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.

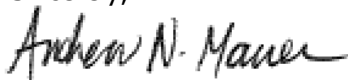
Note: Corresponding changes would also be needed in Sections 3.2, 3.3.3, 4.1.2, and 4.3.3.

- 2) The risk thresholds should not be pass/fail criteria. Consistent with Section 2.5 of RG 1.174, which 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," a bright line approach to risk thresholds is inconsistent with NRC's risk-informed decision making philosophy.

We trust these comments will be helpful as the NRC continues refining its implementation of RIPE.

If you have questions, please contact me or Victoria Anderson (202.739.8101 or vka@nei.org).

Sincerely,



Andrew Mauer

cc:

Andrea Kock, NRR, NRC

Mike King, NRR, NRC