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NUCLEAR ENERGY INSTITUTE

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Ms. Stacey Rosenberg
Branch Chief, PRA Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Pilot for Probabilistic Risk Assessment (PRA) Methods Vetting Panel Process

Project Number: 689

Dear Ms. Rosenberg:

As part of the initiative by the industry and NRC Risk Informed Steering Committees (RISCs) to improve the environment for risk-informed regulation, two cooperative NRC and industry working groups were formed to evaluate approaches to improving the efficiency of evaluation of Probabilistic Risk Assessment (PRA) technical adequacy in support of risk-informed licensing applications. One of the objectives was to develop a process to improve the expediency of acceptance of new PRA methods for use in regulatory applications. The concept of a joint NRC-industry vetting panel to evaluate new methods was proposed, and details of this panel and associated processes were documented in NEI 16-04, *New PRA Method Evaluation Process Guidelines*, which was sent to the NRC on February 8, 2016. As discussed in the NEI 16-04 submittal letter to the NRC, the industry believes that the process should be piloted prior to finalization and NRC endorsement of this document, and the purpose of this letter is to provide details regarding the pilot and to request NRC participation.

The pilot process will involve evaluation of three new methods by the vetting panel, and will be used to determine if further revision to NEI 16-04 is necessary to provide additional detail or clarity. As part of this pilot process, the vetting panel will follow the guidance in NEI 16-04 to determine what review process should be used to achieve determination of acceptability of a method for use in regulatory applications, and will ensure that the selected review method is closed in a timely manner. While closure of the review process, and acceptance of a method, is not application specific, the use of such methods in the base PRA within the scope of acceptability should result in high-quality application submittals with minimal difficulties associated with PRA technical adequacy.

Key aspects of the proposed pilot process are as follows:

- Two weeks in advance of any formal discussions, the vetting panel members will be provided with documentation describing the methods to be evaluated, which should include supporting analysis associated with development of the methods.
- A brief teleconference of the vetting panel will be held to finalize the agenda for a one-day, in-person meeting.
- A one-day, in-person meeting will be held to discuss the review process to be used for each of the methods. Vetting panel members should attend this meeting having evaluated the methods in sufficient detail to provide a preliminary recommended review process. Additional subject matter experts from either industry or NRC may participate as necessary to support the process.
- The final determination for the review process to be used for each method will be made during a teleconference to be scheduled no later than two weeks following the in-person meeting. Following this determination, the vetting panel will ensure that the selected review process is undertaken by the appropriate groups or individuals.

The methods to be evaluated in this pilot process include:

- Fire Location Factor Implementation (EPRI Report 3002005303)
- Modeling Transient Fires (EPRI Report 3002005303)
- Oil Spill Fire Heat Release Rates (EPRI Report 3002005303)

A proposed draft agenda for the in-person vetting panel meeting is attached, and will be revised by the vetting panel in advance of their first meeting as necessary. To support this pilot, please provide any feedback regarding the proposed process as well as 3-4 proposed NRC vetting panel participants. We look forward to working with the NRC on this pilot process, and to cooperatively achieving a more predictable approach to acceptance of new PRA methods for use in risk-informed licensing applications.

Sincerely,

Victoria Anderson

Attachment

c: Mary Drouin, RES/DRA/PRB, NRC
Donald Harrison, NRO/DSRA, NRC
Joseph Giitter, NRR/DRA, NRC