

NRC Public Meeting on PRA Methods Vetting Panel

June 6, 2017

Vetting Panel (Per October 2014 Public Meeting)

- An Industry/NRC panel of experts who will determine the process for making each new PRA methods available for use.
 - Consists of very experienced, senior experts
 - Broad knowledge of PRA technical areas and existing methods.
 - Well-versed on the ASME/ANS PRA standards
 - Past experience in methods development, with full understanding of how methods development is done.
 - Will not conduct detailed technical reviews, but rather will decide the extent of review required for putting a new method on the street.
 - Will need to be insightful and flexible – fit the solution to the problem.

June 2015 Industry White Paper

- Process is intended to provide for rapid resolution and involves:
 - Identification of a new method
 - Review of the attributes of this method by a joint industry-NRC vetting panel to determine the appropriate review process
 - Conduct of the review of the method using the selected process
 - Determining the availability of the method for use in regulatory applications
- Vetting panel is intended to expedite direction of new methods to appropriate review process
 - Vetting panel review of the method is not the default outcome

June 2015 Industry White Paper

- Definition of “new method”
 - It is sufficiently different from methods currently in use throughout the U.S. nuclear industry, or sufficiently different in application of an existing approach, such that it would be considered an upgrade in accordance with the definition of upgrade (and the examples of upgrades) in Nonmandatory Appendix 1-A of ASME/ANS RA-S-2008, *Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Applications*.

NRC Memo on Industry White Paper

- Issued January 7, 2016 (ML15362A456)
- “This new process is not intended to address all new methods.”
- Discussion related to “Definition of Terms,” “Process Options,” and “New Method Groups” may be overly prescriptive
 - NRC staff participating in tabletop identified issues based on their broad knowledge and experience
 - “Vetting panel participants would be expected to use all the available and relevant information, including their knowledge and research, to help them determine the level of review required for a new method.”
- Formal regulatory closure process is still required
 - Confirmation and acceptance of panel decisions would be requested by NEI in a letter to NRC program office

NEI 16-04

- Provides overview of process
 - Conduct of meetings
 - Points of consideration
 - Documentation of decisions
- Gives examples of anticipated decision criteria to vetting panel to support decisions
- Requires expert judgment by vetting panel participants
 - Not intended to be prescriptive
 - Supplemented by standing agendas, etc

Vetting Panel Pilot

- Intended to:
 - Identify potential enhancements to guidance document
 - Develop supporting guidance documents
 - Assess anticipated resources needed to support
- Previous pilot effort revealed issues associated with understanding of scope of vetting panel work and purpose
- Next pilot effort will need to be carefully constructed to stay within relevant boundary conditions

Key Takeaways

- Vetting panel is intended to determine a review process, or determine if acceptability is readily apparent
- Vetting panel will not typically conduct a review of a method
- Purpose of process is to expedite availability of new methods
- Consistency in process, supported by a standing panel, is a key feature
- Expert judgment by panel members is critical element of success