



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 31, 2020

MEMORANDUM TO: Benjamin Beasley, Chief
Advanced Reactor Licensing Branch
Division of Advanced Reactors and Non-Power
Production and Utilization Facilities
Office of Nuclear Reactor Regulation

FROM: Donna Williams, Project Manager
Advanced Reactor Licensing Branch
Division of Advanced Reactors and
Non-Power Production and Utilization Facilities
Office of Nuclear Reactor Regulation

A handwritten signature in blue ink, appearing to read "Donna Williams".

Signed by Williams, Donna
on 11/10/20

SUBJECT: SUMMARY OF OCTOBER 26, 2020, PUBLIC MEETING TO
DISCUSS THE ADVANCED NON-LIGHT-WATER REACTOR
PROBABILISTIC RISK ASSESSMENT STANDARD

On October 26, 2020, the U.S. Nuclear Regulatory Commission (NRC) held a Category 2 public meeting with stakeholders, including the Nuclear Energy Institute (NEI), to discuss the staff's review of draft standard, American Society of Mechanical Engineers/ American Nuclear Society (ASME/ANS) RA-S-1.4 and NEI 20-09, Rev. 0, "Performance of PRA Peer Reviews Using the ASME/ANS Advanced Non-LWR PRA Standard". The staff has posted the meeting notice in the NRC's Agencywide Documents Access and Management System (ADAMS) at Accession No. ML20275A293 and the presentation slides at accession No. ML20296A350. Attachment 1 lists the meeting attendees.

The purpose of the meeting was to:

- Provide an update on the staff's review and endorsement of the advanced non-Light Water Reactor (LWR) probabilistic risk assessment (PRA) standard;
- Present the issues that the NRC anticipates having to consider in developing the staff position and endorsement;
- Discuss the staff's observations on NEI's guidance on peer review (NEI-20-09); and
- Present the next steps in the NRC's endorsement process

The meeting began with NRC updates on the status of its endorsement of the standard including the planned schedule. The staff stated that its endorsement will address acceptability of base PRAs for all licensing stages under Part 52 and Part 50 including license applications that implement the licensing modernization project (LMP) guidance (NEI 18-04, Rev. 1 as endorsed in Regulatory Guide (RG) 1.233).

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301-415-1322

The staff's endorsement will provide clarifications and qualifications to address NRC recirculation ballot comments marked as "deferable." The staff noted that it is exploring options for issuing its endorsement including as a trial use RG, final RG, or as interim staff guidance.

The staff presented a list of areas in which it intends to confirm its position prior to issuance of the final endorsement RG. This list is included in the meeting slides. The staff requested feedback from external stakeholders on the areas proposed.

The NRC staff received NEI 20-09, "Performance of PRA Peer Reviews Using the ASME/ANS Advanced Non-LWR Standard" on June 1, 2020 and provided initial observations during a public meeting on July 22, 2020. On August 24, 2020 (ADAMS Accession No. ML20302A115), the NRC staff received a revision to NEI 20-09 and identified additional comments which it provided in the October 26, 2020, meeting. The staff will consider NEI 20-09 as clarifying guidance for the advanced non-LWR PRA standard. The staff will focus on the key differences between advanced Non-LWRs and operating reactors from a PRA peer review perspective. These differences include novel designs and operational characteristics, limited operational experience, and the different stages in which PRAs are used (design, licensing, and operation). The staff stated that NRC observation of non-LWR peer reviews pilot(s) would support the staff's confidence and accelerate endorsement of NEI 20-09. The NEI agreed to support such observations. The staff offered to hold another meeting to discuss its comments on NEI 20-09 in more detail.

The NRC staff stated that it will update the publicly available Project Plan when an endorsement option is confirmed and plans to conduct additional public meetings every 2-3 months with the next tentatively planned for January 2021.

Enclosure:
List of Attendees

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ADVANCED NON- LIGHT-WATER REACTOR PROBABILISTIC RISK
ASSESSMENT STANDARD DATE: DECEMBER 31,2020

DISTRIBUTION:

- PUBLIC
- DWilliams
- BBeasley
- JNakoski
- MGonzales
- MStutzke
- HPhan
- MHumberstone
- AGilbertson
- MReisiFard
- RidsNrrDANU Resource
- RidsNrrDANUARL Resource
- RidsNrrLASLent Resource

ADAMS Accession No: ML20304A311

NRR-106

OFFICE	NRR/DANU/UARL/PM*	NRR/DANU/UARL/LA*	NRR/DANU/UARL/BC*	NRR/DANU/UARL/PM*
NAME	DWilliams	SLent	BBeasley	DWilliams
DATE	11/03/2020	11/22/2020	11/10/2020	12/31/2020

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List of Attendees (via Teams or conference call)	
Name	Organization
Michelle Gonzales	U.S. Nuclear Regulatory Commission (NRC)
Marty Stutzke	NRC
Hanh Phan	NRC
Anders Gilbertson	NRC
Matthew Humberstone	NRC
Donna Williams	NRC
Ismael Garcia	NRC
Amy Cabbage	NRC
Jonathan DeJesus	NRC
Sunwoo Park	NRC
Marie Pohida	NRC
Jeff Mitman	NRC
Keith Tetter	NRC
Suzanne Dennis	NRC
JS Hyslop	NRC
Arlon Costa	NRC
James Chang	NRC
Jeff Circle	NRC
John Nakoski	NRC
Derek Widmayer	NRC
Mehdi Reisi Fard	NRC
Rob Burg	
Glen Kelly	
Dave Grabaskas	
Aracia Brunett	
Mihaela Biro	
Jason Hou	
Andrea Maioli	
Randy Belles	
Patrick Wicksham	
Emma Refoot	
Willis Poore III	
Kati Austgen	Nuclear Energy Institute (NEI)
Victoria Andersen	NEI
Alex Renner	
Madeline Feltus	Department of Energy
Drew Peebles	Kairos
Jana Bergman	
Mihai Diaconeasa	
Jordan Hagman	Kairos
Brian Johnson	Terrapower
Travis Chapman	X-Energy