

September 15, 2016

MEMORANDUM FOR: Marissa Bailey, Director
Division of Preparedness and Response
Office of Nuclear Security and Incident Response

FROM: Cindy Rosales-Cooper, Senior EP Project Manager */RA/*
Policy and Oversight Branch
Division of Preparedness and Response
Office of Nuclear Security and Incident Response

SUBJECT: SUMMARY OF AUGUST 22, 2016, PUBLIC MEETING TO
DISCUSS A PERFORMANCE-BASED APPROACH TO
EMERGENCY PREPAREDNESS FOR SMALL MODULAR
REACTORS AND OTHER NEW TECHNOLOGIES

On August 22, 2016, a Category 3 public meeting was held at NRC Headquarters, Three White Flint North, 11601 Landsdown Street, North Bethesda, Maryland, 20852, to solicit feedback from the public and interested stakeholders on the potential approach the NRC may follow in developing the rulemaking for Emergency Preparedness (EP) for Small Modular Reactors (SMRs) and Other New Technologies (ONTs). The agenda and presentation made during the meeting can be accessed in ADAMS through accession numbers ML16223A812 and ML16232A263, respectively.

Overall, the feedback from participants was in support of the staff proceeding with a performance-based approach for EP, indicating that it will be more effective because it will focus on achieving desired outcomes. Participants also favored the approach as one that allows for innovation, noting that it should have enough flexibility to accommodate and account for a broad range of sequence of events of various SMR and non-light-water reactor (LWR) designs. Additionally, attendees expressed gratefulness for the NRC's initiative in considering a performance-based approach at this time. The meeting was well attended with approximately 45 in attendance on site and an additional 35 participating via conference call.

The meeting commenced with the NRC staff presenting background information on recent Commission direction to pursue the rulemaking, definitions of SMRs and ONTs, recent and past use of the performance-based approach within NRC's regulations, examples of both the prescriptive and performance-based indicators, as well and potential areas of focus. Also, the staff presented its current consideration of pursuing a performance-based approach for EP for SMRs and ONTs instead of the prescriptive approach currently being used by licensees.

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Specific feedback highlighted the need for NRC to ensure that a performance-based approach would assess: capabilities of the licensees to maintain their emergency plans; adequacy of communications with off-site responders and other interested stakeholders; staff proficiency; and, the availability of facilities and equipment. It was acknowledged that this should be done through inspection and oversight of drills and exercises at a pre-determined frequency. It was also suggested that the validity of the performance indicators be inspected on a periodic basis similar to the current EP Reactor Oversight Program (ROP) Performance Indicator inspection methodology. With respect to inspection and enforcement, feedback supported the use of a program similar to the ROP. Performance indicators submitted could be inspected on a periodic basis similar to approaches used now and could include a review of data collection and verification of recording. However, it was noted that an appropriate approach to enforcement would be necessary to ensure accountability for inadequate performance.

Participants also pointed out the need for determining an appropriate process for changes to EP plans, similar to the current 10 CFR 50.54(q) process. The staff responded that this would be addressed as the rule language and guidance documents would be developed. The potential need for an entire new suite of guidance documents, including the change process, was the only disadvantage identified by participants as it would require additional up-front work to reflect the new approach. Participants responded favorably to the need for this additional work.

Other topics were raised by the participants that were either outside the scope or tangential to the topic of discussion, such as: (1) some non-LWR applicants could apply for prototypes similar to applications for research and test reactor (RTR) licenses under Part 50.21, Class 104 licenses for medical isotope production; (2) staff should consider using an algorithm for the EP framework similar to what is found in NUREG-0396, which was applied as the technical basis for EP for RTRs, post 9/11; and; (3) staff should consider the risk associated with multi-module unit accidents when reviewing EP for SMRs and ONTs. The staff indicated that multiple unit accidents will be evaluated during the licensing process.

Participants were informed of future opportunities to provide feedback on the proposed rulemaking, including public meetings to be scheduled during the comment period of the draft regulatory basis (1st quarter of CY 2017), and during both the draft rule and final rule stages.

List of participants at the meeting and via teleconference call include:

Edward Lyman, UCS Jamie Mallon, PSEG Peter Hastings, TVA Dan Stout, TVA Walter Lee, TVA Marc Nichol, NEI Susan Perkins-Grew, NEI David Young, NEI David Daigle, ENERCON Jonathan Hoyes, FEMA William Eberest, FEMA Michael Witt, FEMA Anthony Defelice, FEMA David Musick, FEMA Ed Davis, USNIC David Blee, USNIC Steve Schilthelm, BWXT David Matthews, NIA Archie Manoharan, Nuscale Power Steven Unikewicz, Nuscale Power Sara Fields, Uranium Watch Dale Wuoko, Global Energy Mgmt. Corp. Susan Chang, Pittsburgh Technical	Marissa Bailey, NRC Deborah Jackson, NRC Robert Kahler, NRC Andrew Carrera, NRC Pete Lee, NRC Todd Smith, NRC Patricia Milligan, NRC Edward Roach, NRC David Werkheiser, NRC Doris Lewis, NRC Mark Caruso, NRC Rocky Foster, NRC Mallecia Sutton, NRC John Segala, NRC Dan Barrs, NRC Kenneth Thomas, NRC Steve Lavie, NRC Arlon Costa, NRC Cindy Rosales-Cooper, NRC Eric Schrader, NRC Jennifer Tobin, NRC Jonathan Fiske, NRC Richard Barkley, NRC Richard Kinard, NRC Kára McCullough, NRC Diane Jackson, NRC
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Distribution:

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