

U.S. Nuclear Regulatory Commission Public Meeting Summary

September 22, 2020

Title: Category 3 Public Meeting to Discuss the Part 53 Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced Reactors

Meeting Identifier: N/A

Date of Meeting: September 22, 2020

Location: Webinar

Type of Meeting: Category 3

Purpose of the Meeting(s):

The NRC hosted a webinar to provide an opportunity for external stakeholders and the NRC staff to exchange information on the NRC's development of a regulatory framework for advanced nuclear reactors in 10 CFR Part 53.

General Details:

The NRC has been directed by Congress through the Nuclear Energy Innovation and Modernization Act (NEIMA) to conduct a rulemaking to establish a technology-inclusive, regulatory framework for optional use by commercial advanced nuclear reactors no later than December 2027. The NRC staff is planning to undertake significant public outreach activities during this rulemaking to hear insights and answer questions from the public about the Part 53 rulemaking. This was the first of many public meetings the NRC staff will be hosting on the Part 53 rulemaking.

Additional information about the rulemaking and questions of interest for consideration by stakeholders can be found in the NRC White Paper titled "Questions Supporting ACRS and Public Interactions on Developing a Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced Reactors" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20195A270) and the Part 53 rulemaking plan contained in SECY-20-0032, "Rulemaking Plan on 'Risk Informed, Technology-Inclusive Regulatory Framework For Advanced Reactors'" (ADAMS Accession No. ML19340A056). Both documents are available on www.regulations.gov using docket ID NRC-2019-0062.

The meeting was attended by 151 people participating through webinar and audio teleconferencing.

Summary of Presentations:

Robert Beall, Rulemaking Project Manager, in the NRC's Office of Nuclear Material Safety and Safeguards, opened the meeting and introduced himself as the NRC Project Manager for the Part 53 rulemaking as well as the meeting facilitator. Mr. Beall emphasized that the purpose of the meeting was to promote the exchange of information on advanced reactors so that Part 53 can fulfill the intention of NEIMA.

Following Mr. Beall, John Segala, Branch Chief of the Advanced Reactor Policy Branch of the Office of Nuclear Reactor Regulation (NRR), made additional opening remarks commenting that the NRC is looking for new ways to license advanced reactors and that NEIMA requires the NRC to complete a regulation by 2027. Mr. Segala mentioned that the NRC is looking to leverage several of the advanced reactor regulatory guidance documents the NRC has already developed as they relate to the Technology Inclusive Content of Application Project and the Advanced Reactor Content of Application Project.

After Mr. Segala, Ho Nieh, the Director of NRR, gave remarks. Mr. Nieh mentioned that growing interest in new reactor technology prompted interest in a new regulatory approach to licensing reactors. He emphasized that the staff considers Part 53 a “high priority” rulemaking activity.

Following Mr. Nieh, Mr. Beall introduced Bill Reckley to speak as the NRC’s technical lead for the Part 53 rulemaking. Mr. Reckley then provided background information on the rulemaking and presented on six discussion topics. The six discussion topics included the following:

- 1) Defining appropriate safety criteria and risk metrics
- 2) Addressing the life cycle of a facility – from design through decommissioning
- 3) Quality Assurance requirements & related standards and certifications
- 4) Integration of various requirements & programs (e.g., environmental, security, emergency preparedness)
- 5) Incorporation and use of performance-based requirements
- 6) Requirements & processing for initial licensing & maintaining licensing basis information throughout life cycle

After Mr. Reckley’s presentation on each topic, the floor was opened to other stakeholder speakers for comment and discussion, and then to other members of the public on the teleconference line.

Following discussion on Topic 6, the meeting participants were given the opportunity to provide additional input or ask questions about the Part 53 rulemaking. After completion of the public participation portion of the meeting, various members of the NRC staff provided brief closing remarks, including expressing appreciation for the public’s participation and input. Mr. Beall then closed the meeting and noted that participants in the public meeting can submit feedback to improve the structure of future public meetings at a link provided in the public meeting announcement.

Public Participation Themes:

Prior to the public meeting, several external stakeholders requested to speak highlighting their organization’s views on particular topics regarding the Part 53 rulemaking, including Marc Nichol of the Nuclear Energy Institute, Cyril Draffin and Jeff Merrifield of the U.S. Nuclear Industry Council, Ed Lyman of the Union of Concerned Scientists, and Prasad Kadambi, an independent consultant. Additionally, members of the public were given an opportunity to contribute to the discussion via the teleconference line.

During the public participation portion of the meeting these key stakeholders as well as several members from the public raised questions. Participants asked questions regarding the extension of the NRC’s existing safety metrics into Part 53 (e.g., total effective dose

equivalent, as low as reasonably achievable), how the NRC would handle licensing first-of-a-kind technologies, specific details on what level of quality assurance standards would be in Part 53 and what would be left to guidance, integration of different elements of the licensing process to allow for trade-offs, how the NRC would design measurable and achievable performance-based standards, the scope of the Part 53 rulemaking, and whether advanced reactors should be held to higher safety standards than current reactors.

Action Items/Next Steps:

The next public meeting will be scheduled for November 2020. In advance of that public meeting, any preliminary rule text will be posted on www.regulations.gov under docket ID NRC-2019-0062. The NRC staff will be meeting with the ACRS Future Plants subcommittee every two months starting in January 2021.

Public meeting participants were encouraged to email any comments from issues raised during the public meeting to either Bob Beall at Robert.Beall@nrc.gov or Bill Reckley at William.Reckley@nrc.gov.

Attachments:

- Meeting Agenda – ML20260H003
- Meeting Presentation Slides – ML20254A014
- Meeting Transcript – ML20275A008