

U.S. Nuclear Regulatory Commission Public Meeting Summary

February 12, 2021

Title: Part 53 Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced Reactors Rulemaking – Subparts C and F Rule Language

Meeting Identifier: 20201405

Date of Meeting: January 7, 2021

Location: Webinar

Type of Meeting: Category 3

Purpose of the Meeting(s):

The Nuclear Regulatory Commission (NRC) staff hosted the second in a series of webinars to provide an opportunity for external stakeholders and the NRC staff to exchange information on the NRC's development of Part 53 preliminary proposed rule language for advanced nuclear reactors.

General Details:

The NRC has been directed by Congress through the Nuclear Energy Innovation and Modernization Act to conduct a rulemaking to establish a technology-inclusive, regulatory framework for optional use by commercial advanced nuclear reactors by 2027. In Staff Requirements Memorandum (SRM)-SECY-20-0032, dated October 2, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20276A293), the Commission directed the NRC staff to accelerate the Part 53 rulemaking timeline, targeting a final rule publication date of October 2024. To facilitate stakeholder engagement throughout the development of the proposed rule, the NRC staff is hosting a series of public meetings to discuss and review feedback on various regulatory topics and preliminary proposed rule language for Part 53.

Prior to the January 7, 2021 public meeting, the NRC staff drafted the Part 53 preliminary proposed rule language for subpart C, "Requirements for Design and Analysis," and the Facility Safety Program (FSP) section of subpart F, "Requirements for Operation." These documents were made publicly available on December 18, 2020, in ADAMS under accession number ML20337A432. To support the discussion of these Part 53 subparts, the NRC staff provided a separate "Discussion Table" for subparts C and F. These documents were made available in ADAMS under accession number ML20337A422 and ML20349A267, respectively. They were also posted on the regulations.gov website under docket ID "NRC-2019-0062." This meeting gave stakeholders an opportunity to provide input on the preliminary proposed rule language and ask questions of the NRC staff.

The meeting was attended by 130 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. He noted that no regulatory decisions would be made at the meeting, clarified that all stakeholder comments are considered advisory and would not receive a formal comment response letter, and advised participants on the features of the virtual meeting platform and how to ask questions. 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. Mr. Segala discussed the NRC's plans to solicit and encourage stakeholder input throughout the Part 53 rulemaking process.

After Mr. Segala, Nanette Valliere, Senior Project Manager in NRR, spoke about the purpose of the public meeting, the NRC staff's plan for the development of additional Part 53 subparts, and the NRC staff's stakeholder engagement plan. When discussing the schedule for anticipated stakeholder interactions, Ms. Valliere encouraged stakeholders to ensure that appropriate subject matter experts are involved in discussions of rule language and plans for guidance documents.

Following her presentation, Bill Reckley, Senior Project Manager in NRR, discussed the preliminary proposed rule language in subpart C. Mr. Reckley provided a broad overview of the subpart C layout and framework and also provided a more detailed discussion of each section of subpart C. Cyril Draffin, Jeff Merrifield, and Steven Nesbitt from the U.S. Nuclear Industry Council (USNIC) also made presentations on subpart C. Prior to and after USNIC's presentation, the floor was opened to comments from participants on the virtual meeting platform and teleconference line. Several stakeholders offered comments.

Mr. Reckley then discussed the preliminary proposed Part 53 rule language for the FSP section of subpart F. Mr. Reckley provided a broad overview of subpart F and explained the purpose and framework of the FSP. Following his presentation, Mr. Reckley introduced Mr. Merrifield of USNIC to give a presentation on subpart F. After Mr. Merrifield's presentation, the floor was opened to comments from participants on the teleconference line. Several stakeholders offered comments on the FSP.

Following these public comments, Ms. Valliere continued the NRC staff's presentation by noting the key comments received during the November 18, 2020, public meeting regarding subpart B. Stakeholder representatives then made presentations providing feedback on subpart B, including Frank Akstulewicz, Dennis Henneke, Rebecca Norris, Travis Chapman, and Ross Moore from USNIC; and Marc Nichol from the Nuclear Energy Institute (NEI). After the presentations from USNIC and NEI, Mr. Beall opened the floor to public comments. Several stakeholders provided additional comments on subpart B and the overall Part 53 rulemaking. Mr. Draffin then provided closing remarks on behalf of USNIC.

After completion of the public participation portion of the meeting, Mr. Beall provided brief closing remarks, including discussing future Part 53 public meetings, providing contact information to be used to provide input on topics to be discussed in future public meetings, identifying the regulations.gov docket number for submitting public comments, and noting 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, three external stakeholders requested to speak during the meeting to provide their views on the preliminary proposed rule language for subparts B, C, and F (FSP section). The speakers were Marc Nichol of NEI; Cyril Draffin, Jeff Merrifield, and others of USNIC; and Michael Keller of Hybrid Power Technologies. Additionally, members of the public were given an opportunity to contribute to the discussion via the virtual meeting platform or teleconference line during the meeting.

During the public participation portion of the meeting these speakers as well as several members of the public raised questions and provided recommended changes to the preliminary proposed rule language. The following were the key stakeholder comments, grouped by subpart:

Subpart B, “Technology-Inclusive Safety Requirements”

- Avoid regulatory requirements that are not needed for adequate protection.
- Revisit the inclusion of requirements to maintain doses to members of the public are “as low as reasonably achievable” in the regulation.
- Avoid being overly deterministic in defining adequate defense in depth.
- Revisit inclusion of the NRC’s quantitative health objectives in the regulation.
- Require a quality control program without prescribing the required approach.

Subpart C, “Design and Analysis”

- Revisit the inclusion of occupational dose requirements in the regulation.
- Reconsider use of the term “generally accepted” to refer to consensus codes and standards.
- Consider whether it is appropriate to assess security through the design process as opposed to using NRC performance requirements.
- Consider addressing inherent safety features in the regulation or guidance.
- Revisit probabilistic risk assessment requirements for technical changes, reporting requirements, and applicability to microreactors.

Subpart F, Requirements for the “Facility Safety Program”

- Define the purpose and benefits of the program to licensees.
- Address concerns about regulatory certainty, industry burden, and backfits.

Commenters also provided input on the overall rulemaking process, including expressing a desire to better understand the totality of the Part 53 rule beyond the individual subparts that have been released to date and raising questions about the best format for future public meetings.

Action Items/Next Steps:

The next public meeting will be scheduled for February 2021. In advance of that public meeting, any preliminary proposed rule text will be posted on www.regulations.gov under docket ID NRC-2019-0062 and in ADAMS. The NRC staff will also be meeting with the Advisory Committee on Reactor Safeguards Future Plants subcommittee in January 2021.

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

Attachments:

- Meeting Agenda – ML20353A093
- Meeting Presentation Slides – ML21006A000
- Meeting Transcript – ML21039A741
- Subparts C and F Preliminary Proposed Rule Language – ML20337A432
- “Discussion Tables” for Subparts C and F – ML20337A422, ML20349A267