

## U.S. Nuclear Regulatory Commission Public Meeting Summary

June 1, 2021

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

**Meeting Identifier:** 20210461

**Date of Meeting:** May 6, 2021

**Location:** Webinar

**Type of Meeting:** Comment-Gathering

**Purpose of the Meeting(s):**

The Nuclear Regulatory Commission (NRC) staff hosted a webinar 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 are 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 May 6, 2021 public meeting, the NRC released preliminary proposed rule language for subparts A, "General Provisions," including § 53.020, "Definitions," and F, "Requirements for Operations," Sections 53.700 – "Operational Objectives," and 53.800 – "Programs." This document was made available to the public on April 26, 2021 in ADAMS under accession number ML21112A195. To support the discussion of these Part 53 subparts, the NRC staff provided a separate "Discussion Table" for the two Sections of subpart F. These documents were made available to the public on April 26, 2021 in ADAMS under accession numbers ML21106A001 (Section 53.700) and ML21106A002 (Section 53.800). The meeting also included a discussion of previously released subparts and the integration of subparts. The meeting proceeded in a "workshop" format, which gave stakeholders an opportunity to provide input on the preliminary proposed rule language and ask direct questions of the NRC staff.

The meeting was attended by over 101 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 and the meeting facilitator. He noted that this meeting is a comment gathering public meeting and that no regulatory decisions would be made at the meeting. Mr. Beall advised participants on the features of the teleconference platform and how to ask questions. Following Mr. Beall, Mr. John Segala, Branch Chief of the Advanced Reactor Policy Branch of the Office of Nuclear Reactor Regulation, made additional opening remarks. Mr. Beall then introduced several other members of the NRC staff, including Mr. Jordan Hoellman, Ms. Nanette Valliere, and Mr. Bill Reckley, who are leads in developing the Part 53 rule.

After Mr. Beall, Jordan Hoellman presented preliminary proposed rule language for subpart A, "General Provisions." Ms. Valliere and Mr. Reckley then presented the preliminary proposed rule language for subpart F, "Requirements for Operations," Section 53.700 – "Operational Objectives." Next, Mr. Reckley presented the preliminary proposed rule language for subpart F, "Requirements for Operations," Section 53.800 – "Programs". Mr. Reckley then presented on previously released subparts of the preliminary proposed rule language. Following each segment of the NRC staff presentation, the floor was open to the public to provide feedback on the topics discussed in the presentation.

Mr. Beall then made brief closing remarks, including noting future public meetings, providing contact information for participants to use to provide input on topics of discussion in future Part 53 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.

## **Public Participation Themes:**

Key stakeholders as well as several members of the public raised questions and provided recommended changes related to the preliminary proposed rule language and previously released subparts. Topics of discussion are listed below and grouped by agenda item. This is a high-level summary and not an exhaustive list of topics discussed during the meeting.

### Definitions and Rule Language Integration

- Definitions
  - Stakeholders asked the NRC to clarify the definitions of several terms, including, "Advanced nuclear plant," "Consensus codes and standards," "Defense in depth," "Design basis accident," "Non-safety related but safety significant," "Safe, stable end state," and "Safety-related."
  - Several stakeholders commented that the NRC should be expansive in its consideration of what qualifies as an "Advanced nuclear plant." Stakeholders pointed to the broad construction of the definition used in the Nuclear Energy Innovation and Modernization Act. Stakeholders encouraged the NRC to allow broad applicability for advanced reactors under Part 53.
- Rule Language Integration
  - Stakeholders expressed concern with how rule provisions would interact with each other, including potential duplication of quality assurance and testing requirements across sections.

- Stakeholders asked the NRC to revise the language in §§ 53.200, 53.700, and 53.800 to avoid scope creep in future license application reviews.

### Regulatory Burden, Rule Philosophy

- Industry stakeholders urged the NRC to reduce net burden with the Part 53 rule. The stakeholders expressed concern that the new subpart F provisions will increase burden, including transition to operations (§ 53.710), integrity assessment programs (§ 53.850), criticality safety program (§ 53.880), and facility safety program (§ 53.892).
- Industry stakeholders expressed concern that the regulatory burden makes the rule unattractive.
- Other stakeholders encouraged the NRC to maintain a high bar on safety and noted the NRC is not obligated to reduce industry burden.

### Operations, Programs

- Industry stakeholders asked the NRC to allow automated plant surveillance and testing rather than manual approaches.
- Industry stakeholders asked the NRC to clarify how the security programs would integrate with the security limited scope rulemaking.

### Previously Released Rule Language

- Subpart B - Technology-Inclusive Safety Requirements
  - Some stakeholders commented that the NRC need not regulate non-safety significant structures, systems, and components.
  - A stakeholder asked the NRC to clarify how inherent characteristics would be credited to defense in depth.
  - Industry stakeholders characterized the NRC's second iteration of subpart B as less than transformational and reiterated concerns about the two-tiered safety construct.
- Subpart C - Design and Analysis
  - Industry stakeholders prefer the NRC adopt a "graded" approach to probabilistic risk assessment.
- Subpart D - Siting
  - Industry stakeholders expressed approval of the potential to combine the exclusion area boundary and the low population zone.
- Subpart E - Construction and Manufacturing
  - Stakeholders asked the NRC to clarify the scope and applicability of a manufacturing license (ML) as it may relate to subcontractors, transportation, the completion status of the reactor, prototype manufacturing, and linkage to the combined operating license.
  - Industry stakeholders will provide input on potential business models for ML applicants and the timeframe for these business models so that the NRC can develop appropriate and timely requirements.

### **Action Items/Next Steps:**

The next public meeting will be scheduled for June 10, 2021. In advance of that public meeting, any preliminary proposed rule text will be posted on [www.regulations.gov](http://www.regulations.gov) under docket ID NRC-2019-0062. The NRC staff will also be meeting with the full Advisory

Committee on Reactor Safeguards (ACRS) and the ACRS Future Plants subcommittee in May 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](mailto:Robert.Beall@nrc.gov) or Bill Reckley at [William.Reckley@nrc.gov](mailto:William.Reckley@nrc.gov).

**Attachments:**

- Meeting Agenda – ML21116A034
- Meeting Presentation Slides – ML21125A161
- Meeting Transcript – ML21140A390
- Part 53 Preliminary Proposed Rule Language for Subparts A, “General Provisions,” including § 53.020, “Definitions,” and F, “Requirements for Operations,” Sections 53.700 – “Operational Objectives,” and 53.800 – “Programs.” – ML21112A195
- Discussion Table for Preliminary Rule Language for the Part 53 Rulemaking: Subpart F - "Requirements for Operation," Section 53.700 - "Operational Objectives" – ML21106A001
- Discussion Table for Preliminary Rule Language for the Part 53 Rulemaking: Subpart F - "Requirements for Operation," Section 53.800 - "Programs" – ML21106A002