

U.S. Nuclear Regulatory Commission Public Meeting Summary

March 17, 2021

Title: Part 53 Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced Reactors Rulemaking – Subpart D Rule Language

Meeting Identifier: 20210077

Date of Meeting: February 4, 2021

Location: Webinar

Type of Meeting: Category 3

Purpose of the Meeting(s):

The Nuclear Regulatory Commission (NRC) staff hosted another 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 February 4, 2021 public meeting, the NRC staff drafted the Part 53 preliminary proposed rule language for subpart D, "Siting Requirements," and made it available to the public on January 21, 2021, in ADAMS under accession number ML21012A284. To support the discussion of this Part 53 subpart, the NRC staff also provided a separate "Discussion Table" for subpart D and made it available in ADAMS under accession number ML21012A278. In addition to discussing subpart D during the meeting, the NRC staff also hosted a discussion on the broader objectives and structure of Part 53. The meeting proceeded in a "workshop" format, which gave stakeholders an opportunity to provide input on the preliminary proposed rule language and engage in dialogue with the NRC staff.

The meeting was attended by approximately 157 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 teleconference 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, made additional opening remarks. Mr. Segala noted that the meeting has been restructured to resemble a "workshop" format to encourage discussion and the exchange of ideas between the staff and stakeholders.

After Mr. Segala, Bill Reckley spoke about the overall framework of the Part 53 rule, and the direction and focus of future public meetings, the NRC staff's plan for the development of additional Part 53 subparts, and the NRC staff's stakeholder engagement plan.

Mr. Reckley introduced the NRC staff's perspectives on goals and success criteria for the Part 53 rulemaking. Following Mr. Reckley, Marc Nichol of the Nuclear Energy Institute (NEI) and Cyril Draffin of the U.S. Nuclear Industry Council (USNIC) each made their own presentations on goals and success criteria.

Mr. Reckley then presented the NRC's key concepts and structures for the Part 53 rule. Following this presentation, Mr. Draffin and other speakers from USNIC presented their comments on key concepts and structures in the rulemaking. The USNIC speakers included Frank Akstulewicz, Dennis Henneke, Travis Chapman, Rebecca Norris, and Ross Moore. Following USNIC, Marc Nichol from NEI presented their key concepts and structures.

Next, Mr. Reckley presented the staff's perspectives on the development of supporting guidance. Mr. Nichol and Mr. Draffin each presented their input on development of key guidance. Mr. Reckley then continued the staff's presentation with a review of several previously released subparts, including subpart B ("Technology-Inclusive Safety Requirements"), subpart C ("Design and Analysis Requirements"), and a portion of subpart F ("Operations -- Facility Safety Program"). Following Mr. Reckley's presentation, Mr. Draffin discussed USNIC's recently comment submittal (ADAMS Accession No. ML21035A003) on alternative preliminary rule language for subpart B, and Mr. Nichol presented on NEI's previously submitted public comment on subpart B (ADAMS Accession No. ML20363A227).

Mr. Reckley then provided an overview of subpart D, "Siting Requirements." Mr. Nichol and Mr. Draffin presented feedback on subpart D. Throughout the presentations made by Mr. Reckley and stakeholders, the floor was opened to comments from the public and many participants provided input.

To close the meeting, Mr. Beall provided brief remarks, including discussing future public meetings, providing contact information to be used to provide input on topics to be discussed 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 at a link provided in the public meeting announcement.

Public Participation Themes:

Prior to the public meeting, external stakeholders representing NEI and USNIC requested to speak highlighting their views on the topics included in the meeting agenda. Additionally, members of the public were given an opportunity to contribute to the discussion via the teleconference line. These stakeholders as well as several others raised questions and provided recommended changes to the preliminary proposed rule language for NRC consideration. Topics raised during the meeting 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.

Goals and Success Criteria

- Part 53 should be developed to create the most efficient option for new reactor applicants.
- The rule should reflect risk-informed principles, but not exclude deterministic methods.
- Safety improvements should be incentivized through reduced requirements.
- The rule should be focused on reasonable assurance of adequate protection and not requirements beyond adequate protection.
- As an initial step in the rulemaking process, the NRC should define success criteria for the rule and ensure that the final rule meets the pre-defined success criteria.

Key Concepts and Possible Structures

- The NRC should focus on making revisions to the safety criteria in subpart B before moving onto developing other subparts because subpart B provides the basis for other subparts in Part 53.
- The NRC has not yet been responsive to feedback provided by stakeholders on Part 53.
- Adequate defense in depth is best addressed in guidance rather than in regulations.
- Consider whether the quantitative health objectives (QHOs) should be retained in subpart B
- Consider revising quality assurance requirements to require a quality control program, but not require specific approaches.

Approach to Rule Language and Developing Key Guidance Documents

- Higher-level requirements should be included in Part 53 and supported by guidance.
- A document should be created that describes available and needed guidance documents to support the Part 53 rule.
- Additional paths for compliance with Part 53 beyond NEI 18-04 need to be identified.

Discussion of Previously Released Subparts

- Consider industry stakeholder-provided alternatives to subpart B preliminary proposed rule language.
- Clarify that the rule is adhering to the Commission Advanced Reactors Policy Statement that advanced reactors should be at least as safe as the operating fleet.
- Simplify and clarify Subpart C should be around updated safety criteria.
- Include high level requirements that allow flexibility in Subpart C.
- Clarify how Part 53 will address spent fuel and decommissioning.

Subpart D – Siting Requirements

- The NRC should reconsider siting requirements to be more transformational.
- The siting requirements retain language from 10 CFR part 100 that unnecessarily prohibit advanced reactors from being co-located with populated areas, without a clear tie to a safety goal.

- Reconsider establishing the emergency planning zone at the site boundary, which, among other concerns, can significantly limit the ability of the public to establish standing to challenge siting of the facility.

Action Items/Next Steps:

The next public meeting is tentatively scheduled for April 2021. In advance of the next public meeting, any new or revised preliminary proposed rule language will be posted on www.regulations.gov under docket ID NRC-2019-0062. The NRC staff will also be meeting with the Advisory Committee on Reactor Safeguards Future Plant Designs subcommittee in March 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 – ML21035A040
- Meeting Presentation Slides – ML21032A045
- Meeting Transcript – ML21062A112
- Subpart D, “Siting Requirements” Preliminary Proposed Rule Language – ML21012A284
- “Discussion Table” for Subpart D – ML21012A278