

U.S. Nuclear Regulatory Commission Public Meeting Summary

October 26, 2021

Title: Public Meeting to Discuss the Part 53 Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced Reactors Rulemaking – Subpart F, “Requirements for Operations,” Sections Related to Staffing, Training, Personnel Qualifications, and Human Factors

Meeting Identifier: 20211312

Date of Meeting: October 26, 2021

Location: Webinar

Type of Meeting: Comment-Gathering

Purpose of the Meeting(s):

The Nuclear Regulatory Commission (NRC) staff hosted a topical webinar to provide an opportunity for external stakeholders and the NRC staff to exchange information on the NRC’s development of specific sections of the 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. 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 October 26, 2021, public meeting, the NRC released a “Discussion Table” with preliminary rule language for Subpart F - “Requirements for Operations,” which contained sections related to staffing, training, personnel qualifications, and human factors. This document was made available to the public on October 18, 2021, in the Agencywide Documents Access and Management System (ADAMS) under accession number ML21267A006. This public meeting also included discussions of other recently released iterations of preliminary proposed rule language for other sections and subparts of Part 53. Other released iterations of preliminary proposed rule language are identified on the NRC website, on regulations.gov website, and in an ADAMS package under accession number ML20289A534.

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 approximately 106 people participating through webinar and audio teleconferencing.

Summary of Presentations:

Robert Beall, Senior Project Manager in the NRC's Office of Nuclear Material Safety and Safeguards, opened the meeting and introduced himself as the 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. Following Mr. Beall, Mr. Steve Lynch, Acting Chief of the Advanced Reactor Policy Branch in the Office of Nuclear Reactor Regulation, made additional opening remarks. Mr. Beall then introduced Mr. Jesse Seymour, from the Office of Nuclear Reactor Regulation, as well as an additional speaker from the U.S. Nuclear Industry Council (USNIC), and advised participants on the features of the teleconference platform and how to ask questions.

After Mr. Beall, Mr. Seymour presented the preliminary proposed rule language for Subpart F, sections related to staffing, training, personnel qualifications, and human factors. Following Mr. Seymour, Mr. Cyril Draffin of USNIC presented USNIC feedback on Subpart F, sections related to staffing, training, personnel qualifications, and human factors. Following Mr. Draffin, Mr. Beall introduced a discussion of other sections and subparts of Part 53. 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 and members of the public raised questions and provided recommended changes related to the preliminary proposed rule language. 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.

Subpart F - Sections Related to Staffing, Training, Personnel Qualifications, and Human Factors.

- A stakeholder asked NRC staff to provide details on guidance related to these topics.
- A stakeholder noted that identifying areas of needed distinction between Part 55, "Operators' Licenses," and Part 53, and potential changes resulting from them, would help NRC staff to clarify independence of this subpart from Part 55.
- A stakeholder commented that Part 53 requirements are more complex than Part 55 requirements.
- A stakeholder asked for clarification on the expansion of human factors to response facilities/offsite included in the rule.
- A stakeholder asked if the criteria for certified operators set too high of a bar. The stakeholder added that if there is no option for a combination of licensed and certified operators, the value of certified operators seems limited.
- A stakeholder asked if NRC staff gained insights from the Canadian Nuclear Safety Commission's simulator facility reviews.

- A stakeholder asked if the staffing plan would address minimum staffing requirements or actual staffing requirements, and how higher levels of staffing, particularly at early stages of plant operation, could be planned for without being required for the entire duration of plant operation.
- A stakeholder urged NRC staff to consider autonomous operations for Part 53 and clarify the role of operators.
- A stakeholder asked if any aspects of the staffing approach could be applied to Part 50 licensees.
- A stakeholder asked NRC staff to clarify criteria for only having certified operators (e.g., clarifying human actions in this context). The stakeholder also noted that if the addition of optional safety measures involving human actions would make the licensee need licensed operators, licensees may not install such measures, reducing the safety of the plant.
- A stakeholder asked NRC staff to clarify the extent of HFE requirement in plant designs.
- A stakeholder asked NRC staff to clarify the partial scope simulator requirements.
- A stakeholder urged NRC staff to ensure that the staffing requirements are consistent with the security requirements.
- A stakeholder said that incapacitation due to temporary disability or illness should be addressed in the rule.
- A stakeholder noted that safety functions are not all equal in terms of risk (e.g., AOOs vs. DBAs), but NRC staff does not seem to be appropriately distinguishing and providing flexibility as it creates requirements. The stakeholder also asked on what basis NRC staff is imposing new safety function requirements beyond the existing CFR.
- A stakeholder raised a concern that licensed/certified operator requirements seem to extend to general plant operations, not just areas connected to nuclear safety.

Other Sections and Subparts of Part 53

- Stakeholders and NRC staff discussed the definition of a reactor under Part 53, including issues related to remaining consistent with the definition in NEIMA.
- A few stakeholders noted concern with the ability of any reactor to be licensed under Part 53.
- A stakeholder noted there would be confusion if a design certification could be issued under Part 53, Parts 50 or 52, but then an operating or combined license could be issued under a different Part.

Other

- A stakeholder asked about NRC staff's plans to release new iterations of previously released subparts.
- Stakeholders requested that NRC staff extend the public comment period on regulations.gov. NRC staff asked stakeholders to submit written requests and noted they will extend the public comment period.
- Stakeholders asked about guidance, specifically the timeline for it, and whether the table provided several months ago would be updated.
- A stakeholder noted that NRC staff is in general adding new CFR requirements as opposed to referencing existing regulations and clarifying as needed.
- A stakeholder said that numerous comments/questions have been submitted to the NRC but responses are very rarely provided, which does not instill confidence in the rulemaking process.

- A stakeholder asked about the composition of the group working on the Part 53 rulemaking.
- A stakeholder asked NRC staff to clarify if there would be a provision for exemptions in the rule. NRC staff confirmed so.

Action Items/Next Steps:

The NRC staff will continue to announce public meetings to discuss and receive feedback on various regulatory topics and preliminary proposed rule text. In advance of a future public meeting, any preliminary proposed rule text 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 Plants subcommittee in November 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 – ML21288A403
- Meeting Presentation Slides – ML21295A241
- Meeting Transcript – ML21320A045
- Discussion Table for Preliminary Rule Language for the Part 53 Rulemaking: Subpart F - "Requirements for Operations " - Sections Related to Staffing, Training, Personnel Qualifications, and Human Factors – ML21267A006
- Preliminary Rule Language Documents for the Risk-Informed, Technology-Inclusive Regulatory Framework For Advanced Reactors (Part 53) Rulemaking – ML20289A534