

U.S. Nuclear Regulatory Commission Public Meeting Summary

July 6, 2020

Title: Public Meeting to Discuss the Preliminary Proposed Rule Text for the Alternative Physical Security Requirements for Advanced Reactors Rulemaking

Meeting Identifier: 20200250

Date of Meeting: April 22, 2020

Location: Webinar

Type of Meeting: Category 3

Purpose of the Meeting(s): The purpose of this meeting was to discuss the preliminary proposed rule language and the NRC staff's disposition of public comments screened out of this rulemaking related to development of alternative physical security requirements for non-light water reactors and small modular reactors

General Details: The U.S. Nuclear Regulatory Commission (NRC) staff conducted an online public meeting on Thursday, February 20, 2020, to discuss the preliminary proposed rule language for the alternative physical security requirements for advanced reactors rulemaking. The meeting start was delayed until 1315 EST, due to technical difficulties utilizing Skype for the video display and an NRC bridge line for the audio, and it concluded at 1440 EST. There were approximately 97 participants including affiliates from the NRC, Nuclear Energy Institute (NEI), NuScale, Kairos Power, TerraPower, X-Energy, Union of Concerned Scientists, Tennessee Valley Authority, the Chair of the U.S. Nuclear Industry Council's Advanced Reactor Task Force, members of the public, and the press, to name a few.

Nanette Valliere from the Office of Nuclear Reactor Regulation (NRR) started the meeting by welcoming all attendees and providing a quick overview of the agenda and meeting logistics, including instructions given by the phone operator. Once the introductions were complete, Ms. Valliere turned the meeting over to John Monninger (Division Director, Division of Advanced Reactors and Non-Power Production and Utilization Facilities (DANU) in NRR) to provide NRC opening remarks. Mr. Monninger noted that this rule is a priority for the Commission and a lot of interest has been expressed by external stakeholders. Mr. Monninger stated the purpose of the meeting was to get stakeholder feedback and achieve a common understanding of stakeholder perspectives on the alternative physical security requirements for advanced reactors and on the NRC's recently release preliminary proposed rule language.

Ms. Valliere then gave the NRC's presentation. The presentation provided an overview of the recently released preliminary proposed rule language (ADAMS Accession Nos. ML20111A007 and ML20072F620, respectively) that incorporated the three performance criteria (proposed new section 10 CFR 73.55(a)(7)) from the regulatory basis and the introduction of four alternatives (under proposed new section 10 CFR 73.55(s)) to specific physical security requirements for those entities that satisfy any one of the performance criteria. Part-way through, the NRC engaged with the participants for a question and answer session related to the preliminary proposed rule language. The NRC's presentation continued on to highlight the

disposition of public comments from a previous December 2019 public meeting (ADAMS Accession No. ML20029E959) related to potential additional issues to be addressed in this rulemaking. The NRC described those issues that it screened out for consideration and engaged with the participants for a question and answer session related to the disposition of the previous public comments. The NRC's presentation concluded with a notification to the participants that NEI submitted a draft guidance document related to this rulemaking – specifically on the methodology for analyses used to meet the proposed 10 CFR 73.55(a)(7) performance criteria (ADAMS Accession No. ML20107D894). After the NRC presentation the meeting was turned over to David Young of NEI, who gave a short overview of this draft guidance.

Public Participation Themes: The NRC and the participants covered a variety of issues. The transcript is available to read the exact comments and discussion points (ADAMS Accession No. ML20122A020).

Nuclear Industry:

NEI expressed concern that the preliminary proposed rule language regarding the relief from the minimum number of armed guards, is not in line with what the industry had been conveying to the NRC since NEI's white paper, "Proposed Physical Security Requirements for Advanced Reactor Technologies," dated December 14, 2016 (ADAMS Accession No. ML17026A474). The concern expressed was that the relief from this requirement alone is not enough to reduce costs associated with providing an armed response force to the point where it would be practicable or feasible for most advanced reactors. In addition, industry representatives noted that the level of effort required in performing the analyses that would be required under this proposed rule is as much or more than would be required in submitting an exemption request, which could be done under today's regulations. NEI noted that they do not believe nor intend that their proposal would change how the design basis threat is defined or required to be met by commercial nuclear power facilities. Rather, it would just change how a plant responds to the design basis threat by relying on offsite law enforcement resources and the design of the facility itself without the need of an onsite armed responder.

Other members of industry (e.g., TVA, NuScale) supported NEI's comments. On May 26, 2020, NEI submitted a letter highlighting the comments they made during the public meeting (ADAMS Accession No. ML20154K704).

UCS Comments:

Edwin Lyman of the UCS highlighted a potential concern with the preliminary proposed rule language, namely that, as written, the preliminary draft requirements could be read to apply to existing Part 52 licenses like those for Vogtle Units 3 & 4. The NRC clarified that this was not the intention and they would re-examine the preliminary proposed rule language to address this point of confusion. He also noted that the notion that an advanced reactor could be designed safe enough to have no offsite radiological consequences is not realistic.

Additional Comments:

Some participants asked whether there would be additional changes or conforming changes to other parts of the NRC's regulations. The NRC clarified that the preliminary proposed rule language did not include conforming changes, but the final text will have any necessary conforming changes.

Conclusion:

The NRC appreciated the discussions and comments made during the meeting and noted that the rule language is still under development and the staff will consider these comments as the NRC continues to develop the proposed rule.

Action Items/Next Steps:

- The NRC will review the transcript and comments provided and take them into consideration as the staff further develops this rulemaking.
- The NRC intends to hold a future public meeting dedicated to the draft guidance.

Attachments:

- Transcript for April 22, 2020 Public Meeting (ADAMS Accession No. ML20122A020)
- Public Meeting Notice - Notice of Category 3 Public Meeting to Discuss the Preliminary Proposed Rule Text for the Alternative Physical Security Requirements for Advanced Reactors Rulemaking, April 22, 2020 (ADAMS Accession No. ML20112F411)
- NRC Presentation - Rulemaking for Alternative Physical Security Requirement for Advanced Reactors, April 22, 2020 Public Meeting (ADAMS Accession No. ML20111A007)
- Preliminary proposed rule language - in support of Alternative Physical Security for Advanced Reactor Proposed Rule, April 22, 2020 Public Meeting (ADAMS Accession No. ML20072F620)
- NEI Additional Input for the Rulemaking for Physical Security for Advanced Reactors, dated January 10, 2020 (ADAMS Accession No. ML20029E959).
- Draft B of NEI 20-05, "Methodological approach and considerations for a security assessment to demonstrate compliance with the performance criteria of 10 CFR 73.55(TBD)," dated April 13, 2020 (ADAMS Accession No. ML20107D894).
- NEI white paper, "Proposed Physical Security Requirements for Advanced Reactor Technologies," dated December 14, 2016 (ADAMS Accession No. ML17026A474).
- NEI Letter from D. True to J. Tappert re: Alternative Physical Security for Advanced Reactor Proposed Rule, dated May 26, 2020 (ADAMS Accession No. ML20154K704)

ATTENDEES LIST:

Aaron Sanders, NRC
Anthony Bowers, NRC
Brian Thomas, NRC
Carolyn Wolf, NRC
Cindy Bladey, NRC
David Cullison, NRC
Dennis Andrukut, NRC
Eric Bowman, NRC
Ian Jung, NRC
Ilka Berrios, NRC
Jill Shepherd, NRC
Jim Beardsley, NRC
John Monninger, NRC
John Segala, NRC
John Tappert, NRC
Jordan Hoellman, NRC
Joseph Giacinto, NRC
Joseph McManus, NRC
Juris Jauntirans, NRC
Kevin Coyne, NRC
Marcia Carpentier, NRC
Maryam Khan, NRC
Mekonen Bayssie, NRC
Nanette Valliere, NRC
Norman St. Amour, NRC
Pete Lee, NRC
Russell Felts, NRC
Shana Helton, NRC
Shawn Campbell, NRC
William Orders, NRC

Darrell Gardner, Kairos Power
David Young, NEI
Ewin Lyman, Union of Concerned Scientists
Farshid Shahrokhi, Framatome
Kevin Deyette, NuScale
Kurt Harris, Flibe Energy
Herman Van Antwerpen, X-Energy
Jana Bergman, Curtiss Wright
Jeffrey Merrifield, U.S. Nuclear Industry
Council's Advanced Reactor Task Force
Kati Austgen, NEI
Kevin Casey, Tennessee Valley Authority
Marc Nichol, NEI
Margaret Ellenson, Kairos Power
Martin O'Neill, NEI
Nathan Faith, Exelon Nuclear
Niko McMurray, ClearPath
Pat Asendorf, Tennessee Valley Authority
Pete Gaillard, TerraPower
Peter Hastings, Kairos Power
Steve Rhyne, NuGen
T. Sofu, DOE
Tammy Morin, Holtec International
Tim Sande, Enercon
Brandon Wiley Waites, Southern Nuclear
Yvotte Brits, X-Energy