

# U.S. Nuclear Regulatory Commission Public Meeting Summary

February 18, 2022

**Title:** Alternative Physical Security Requirements for Advanced Reactors Rulemaking: Preliminary Proposed Rule Language and Key Guidance Elements

**Meeting Identifier:** 20211519

**Date of Meeting:** January 20, 2022

**Location:** Webinar

**Type of Meeting:** Information Meeting with a Question-and-Answer Session

**Purpose of the Meeting:** The purpose of this meeting was to present the recently released revised preliminary proposed rule text as part of the alternative physical security requirements for non-light water reactors and small modular reactors proposed rule. The staff also presented key elements of the latest draft implementation guidance documents.

**General Details:** The U.S. Nuclear Regulatory Commission (NRC) staff conducted an online public meeting on Thursday, January 20, 2022, to present the latest preliminary proposed rule language and key elements of the proposed guidance in DG-5072 (formerly DG-1365), "Guidance for Alternative Physical Security Requirements for Small Modular Reactors and Non-Light-Water Reactors," and DG-5071, "Target Set Identification and Development for Nuclear Power Reactors." A meeting handout was made available containing the full preliminary proposed rule language in redline-strikeout form comparing proposed rule language to existing regulations. The Agencywide Documents Access and Management System (ADAMS) Accession numbers for these and related documents are provided under the attachment section of this summary. The meeting started at 1100 ET and concluded at 1243 ET. There were approximately 88 participants, including NRC staff and external stakeholders.

Dennis Andrukat from the Office of Nuclear Material Safety and Safeguards started the meeting by welcoming all attendees and providing a quick overview of the agenda and meeting logistics. Michele Sampson from the Office of Nuclear Security and Incident Response (NSIR) provided opening remarks from management. Dennis Andrukat turned the meeting over to Beth Reed from the Division of Advanced Reactors and Non-power Production and Utilization Facilities in the Office of Nuclear Reactor Regulation, Lou Cubellis from the Division of Physical and Cyber Security Policy, NSIR, and Stacy Prasad from the Division of Security Operations, NSIR, who each gave a portion of the NRC's presentation. The first half of the presentation focused on the preliminary proposed rule language with Beth Reed presenting the 73.55(b)(3) and 73.55(s)(1) information and Lou Cubellis presenting the 73.55(s)(2) information. The second half of the meeting focused on the draft guidance, DG-5072 and 5071. Beth Reed and Lou Cubellis presented information on DG-5072 related to the proposed rule language under 73.55(s)(1) and (2) in addition to providing focused information on the consequence analysis and meaning of "significant release of radionuclides." Stacy Prasad presented an updated overview of DG-5071 regarding the NRC's proposed target set identification methodology for advanced reactors. The methodology is intended to be captured in the rule's proposed revision to Regulatory Guide 5.81.

**Public Participation Themes:** After the staff presented their slides, the meeting was opened to attendees to ask questions and present feedback. There were seven attendees who presented various comment(s) on the presented material. For the full details of the comments and the staff's responses during the public meeting, please see the meeting transcript.

Nuclear Industry Comments:

- Slide 7: Regarding the proposed 10 CFR 73.55(b)(3) addition of “significant release of radionuclides from any source,” and the existence of a safeguards document that defines scenarios for spent fuel pool (SFP) sabotage, the question was asked if the proposed rule required additional SFP sabotage scenarios to be analyzed? If so, this may have an impact on the current security-by-design approach certain advanced reactor vendors are currently taking in their designs.
- Slide 9: A stakeholder echoed another comment made on not defining the term “significant release,” stating that the term is vague and would lead to wide and varied interpretations of its meaning. The stakeholder asked the staff to clarify its thought process on this issue and then suggested the proposed rule should reference a value such as the 10 CFR 50.34 and the associated 10 CFR 52.79 [reference dose] values. . Lastly, the stakeholder added that it is not clear why these value[s] or similar values wouldn't be codified in this proposed rule if it's the same expectation across the board and the preliminary proposed rule language for the current 10 CFR Part 53 rulemaking includes references such values.
- Slide 14: A stakeholder asked what necessary information would be expected to be provided to law enforcement pursuant to the proposed requirement in 10 CFR 73.55(s)(2)(ii)(A)(3) and what would be the periodicity of that licensees would be required to make training available to law enforcement.
- Slide 15: A stakeholder asked about the use of the term “high assurance” as proposed under 10 CFR 73.55(s)(2)(ii) versus using the more commonly used term “reasonable assurance,” how will the staff reconcile using “high assurance”?
- Slide 15: A stakeholder stated that licensees are taking on a large risk using the local law enforcement for offsite response, when ultimately the local law enforcement is not under the jurisdiction of the NRC, and therefore the licensee would be on the hook if law enforcement is unable to meet the performance requirements. The stakeholder also suggested that the NRC should regulate the licensee and the proposed rule should require that the licensee have a program that considers the timeliness of enacting interdiction and neutralization duty compensatory measures.
- Slide 18: A stakeholder suggested additional clarification is needed under the proposed physical barrier alternative to clarify what the alternative covers. Especially since the referenced regulations covers numerous areas such as different barriers (e.g., vehicle barriers) and various requirements such as access and delay.
- Slide 19: A stakeholder asked if the proposed alternative for allowing an offsite secondary alarm station could accommodate a co-located, single secondary alarm station that can service multiple sites.
- Slide 19: A stakeholder stated they see potential problems with the proposed requirement for offsite secondary alarm stations to have the same functions as the central alarm station (that is located on site).
- Slide 19: A stakeholder questioned the impact of the offsite secondary alarm station and the equipment used would have on the cyber security plans.
- Slide 26: A stakeholder stated a concern on the how a consequence analysis, covering a design basis threat, would be performed and look like for certain non-light-water reactors

with unique features (compared to today's large light-water reactors). And has the staff considered what a bounding analysis for such a facility's consequence analysis would look like?

- Slides 10, 30: A stakeholder asked for clarification on the difference between slide 10 demonstrating analysis versus the slide 30 screening of achievable target sets analysis.
- Slides 29, 30: A stakeholder stated there are many different design basis accidents (DBAs), for example Chapter 15, Chapter 19, beyond DBAs, etc. The stakeholder suggested having clear wording in the proposed guidance on which DBA(s) are being referred in the proposed draft guidance on the consequence analysis and/or target set identification.
- A stakeholder asked if the expectation of this rule would be that law enforcement must participate in force-on-force exercises/drills as part of the licensee's program if the licensee is invoking the proposed interdict and neutralize alternative under 10 CFR 73.55(s)(2)(ii).
- A stakeholder stated that the proposed rule's interdiction and neutralization alternative would place a lot of onus on law enforcement. The stakeholder asked if there would be a requirement or expectation for an MOU between licensee and law enforcement specific to this alternative.

#### Non-Governmental Organization Comments:

- Slide 14: A stakeholder asked about the adequacy of the proposed regulations and guidance for an advanced reactor licensee's providing sensitive facility information to law enforcement and law enforcement's handling of safeguards information stemming from implementing this proposed rule.
- A stakeholder, responding to a statement that the licensee would be subject to a performance evaluation program, asked if that meant law enforcement would not be exempt from the performance evaluation program including participating in drills. The stakeholder suggested law enforcement would have to be drafted into these drills and exercises in order to satisfy the law enforcement's functions [and for licensee to maintain an effective performance evaluation program].
- A stakeholder stated that the proposed rule language is too general and that it seems so much of the details are expected to be covered in the draft guidance. The stakeholder suggested comparing similar requirements to the existing regulations and to provide a similar level of regulatory detail. One example included the staff's proposed use of "significant release" under 10 CFR 73.55(b)(3).
- A stakeholder stated their reservation with this rule and questioned whether this was the right time for a rule that would potentially transfer to law enforcement the responsibility for interdicting and neutralizing the design basis threat adversary. Citing the current political climate, the lack of clarity regarding the vetting process for local law enforcement, and the potential infiltration of extremist groups in local law enforcement, the stakeholder suggested that relying on law enforcement and providing them with any sensitive information would not be a wise choice at this time.

**Conclusion:** The NRC appreciated the discussions and comments made during the meeting and noted that the preliminary proposed rule language and the draft implementation guidance are still under development as the staff moves forward to finalize the draft rule package and begin review within the agency. The rulemaking project manager noted that the staff does not plan to conduct further public meetings between now and when the proposed rule is published.

The staff has held numerous public meetings and has considered the public's feedback received to date.

**Next Steps:**

- Finalize the draft proposed rule package
- Finalize the draft implementation guidance documents.
- Begin review of the draft rule and the draft guidance.
- The staff intends to submit the proposed rule package to the Commission in June 2022.

**Attachments:**

- Public Meeting Notice - Notice of Information Meeting with a Question-and-Answer Session Category Public Meeting Regarding Alternative Physical Security Requirements for Advanced Reactors Rulemaking: Preliminary Proposed Rule Language and Key Guidance Elements, January 20, 2022 (ADAMS Accession No. ML21336A510)
- NRC Presentation - Rulemaking for Alternative Physical Security Requirement for Advanced Reactors, January 20, 2022 Public Meeting (ADAMS Accession No. ML22019A075)
- Rulemaking: Proposed Rule: Preliminary Proposed Rule Language: Physical Security for Advanced Reactors; Part 50 and Part 73; Redline Strikeout (ADAMS Accession No. ML21336A004)
- Public Meeting Transcript - Rulemaking for Alternative Physical Security Requirement for Advanced Reactors, January 20, 2022 Public Meeting (ADAMS Accession No. ML22024A064)