



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

August 12, 2024

ALL AGREEMENT AND NON-AGREEMENT STATES  
STATE LIAISON OFFICERS  
ALL FEDERALLY RECOGNIZED AMERICAN INDIAN AND ALASKA NATIVE TRIBES

NOTICE OF REQUEST FOR COMMENT: ALTERNATIVE PHYSICAL SECURITY  
REQUIREMENTS FOR ADVANCED REACTORS – PROPOSED RULEMAKING (STC-24-045)

**Purpose:** To provide notice that the U.S. Nuclear Regulatory Commission's (NRC) published a proposed rule on August 9, 2024, on the Alternative Physical Security Requirements for Advanced Reactors ([89 FR 65226](#)).

**Background:**

In the rule, the NRC proposes amending its regulations under Title 10 of the *Code of Federal Regulations* (CFR) Section 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage," to allow eligible future nuclear power reactors that are either small modular reactor (SMR) or non-light water reactors (non-LWR) to use new alternative physical security requirements. These proposed new requirements would provide appropriate alternatives to certain existing physical security requirements found in 10 CFR 73.55.

Previously, the NRC issued a regulatory basis document to provide the initial basis and information utilized in developing this proposed rule. The regulatory basis was published in the *Federal Register* (FR) on July 16, 2019 ([84 FR 33861](#)).

The major provisions of this proposed rule and guidance include:

- Proposed specific alternative physical security requirements to allow:
  - no minimum number of onsite armed responders.
  - reliance on law enforcement or other offsite armed responders to interdict and neutralize adversaries.
  - use of alternatives to physical barriers.
  - offsite location of secondary alarm station.
  - non-vital area identification of secondary alarm station.
- Consequence-based eligibility criterion to apply any of the proposed security alternatives.

This proposed rulemaking would be applicable only to advanced reactor (i.e., SMR and non-LWR) facilities that would be licensed under 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," or 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." Examples of such advanced reactors include high-temperature, gas-cooled reactors; molten salt reactors; and pebble bed reactors. In anticipation of the NRC's need to regulate these new technologies and for those advanced reactors seeking to be licensed under 10 CFR Part 50 or 52, the agency is developing this rule. Please note that this proposed rulemaking is separate from the rulemaking to create 10 CFR

Part 53. The 10 CFR Part 53 rulemaking would develop a new, entire regulatory framework for advanced reactors, inclusive of its own physical security requirements, meant as a risk-informed, performance-based licensing option to the existing 10 Part 50 or 52. This proposed rulemaking would not apply to any non-power nuclear reactors (also referred to as research and test reactors), fuel cycle facilities, or the currently operating fleet of large light-water nuclear power reactors producing greater than 1,000 megawatts thermal power.

A draft environmental assessment for this proposed rule was issued and is available for public review and comment. The focus of this assessment was an advanced reactor license applicant's evaluation of design alternatives that could prevent or mitigate severe accidents. For the proposed security alternatives, there would be no impact to the environment because the action does not significantly increase the probability or consequences of accidents, nor result in changes to the types of effluents that may be released off site, and there is no significant increase in occupational or public radiation exposure.

Currently, there are no advanced reactor licensees (including none licensed under 10 CFR Part 50 or 52). However, the NRC is aware of multiple potential sites in the United States for a non-LWR and/or SMR which include but are not limited to the Clinch River Site in Tennessee (for which the Tennessee Valley Authority would be the prospective applicant), or one site for a non-LWR in Wyoming (TerraPower would be the prospective applicant), and Eielson Air Force Base. For more information on advanced reactor and small modular reactor applications, please visit the NRC website: <https://www.nrc.gov/reactors/new-reactors/advanced.html>. Given the potential for the NRC to receive a request from an advanced reactor (SMR or non-LWR) applicant or licensee to utilize one or more of these alternative physical security requirements at locations that could affect Tribes and/or States, the NRC is employing a broad, national outreach strategy on this proposed rule.

**Discussion:** The NRC published the proposed rule in the *Federal Register* on August 9, 2024 ([89 FR 65226](#) – proposed rule). Comments on the proposed rule are due by October 23, 2024. The *Federal Register* notice contains details on how to submit comments. The *Federal Register* notice and documents related to this rulemaking are posted on the Federal e-Rulemaking Portal <https://www.regulations.gov> under Docket ID [NRC-2017-0227](#). We appreciate and thank you for your interest in this activity and welcome your feedback.

The public has the opportunity to comment on the proposed rule (including the draft environmental assessment) during the associated public comment period. The NRC would revise the proposed rule to address public comments, as needed, and publish it as a final rule in the *Federal Register*. The NRC may hold outreach activities, including public meeting(s), that would be open to all including the Tribal nations, during this public comment period and beyond.

For more general information about the NRC, what we regulate, how we regulate, and our rulemaking process, please visit our website at <https://www.nrc.gov> or view our Information Digest NUREG-1350 (<https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1350/>). You may also visit the NRC's public meeting website for information about any public meeting at <https://www.nrc.gov/pmns/mtg>. For more information on advanced reactors, please visit our Web sites at <https://www.nrc.gov/reactors/new-reactors/advanced/licensing-activities.html> and <https://www.nrc.gov/reactors/new-reactors/smr.html>.

Please inform the NRC contact if there are other avenues of communication the NRC can use that would be beneficial to Tribal Nations. If you have any questions regarding this rulemaking or this correspondence, please contact the individuals named below:

POINTS OF CONTACT:

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Sincerely,



Signed by Giantelli, Adelaide  
on 08/12/24

Adelaide S. Giantelli, Chief  
State Agreement and Liaison Programs Branch  
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Office of Nuclear Material Safety  
and Safeguards

STC-24-045-Proposed Rule - Notice of Request for Comment - Alternative Physical Security Requirements for Advanced Rulemaking DATE August 12, 2024

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