

1DRAFT SUPPORTING STATEMENT
FOR
INFORMATION COLLECTIONS CONTAINED IN
THE ALTERNATIVE PHYSICAL SECURITY REQUIREMENTS FOR ADVANCED REACTORS
PROPOSED RULE

10 CFR PART 52
LICENSES, CERTIFICATIONS, AND APPROVALS FOR NUCLEAR POWER PLANTS

(OMB Clearance No. 3150-0151)
REVISION

Abstract

The U.S. Nuclear Regulatory Commission (NRC) is proposing to amend its regulations to create a limited number of voluntary alternative physical security requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) for advanced reactors used to generate power. For the purposes of this proposed rule, the term “advanced reactors” refers to power reactors that are either non-light-water reactors (non-LWRs) or small modular reactors (SMRs) that would be licensed under 10 CFR Part 50, “Domestic Licensing of Production and Utilization Facilities” or under 10 CFR Part 52, “Licenses, Certifications, and Approvals for Nuclear Power Plants.”

The physical security requirements for power reactors are contained under 10 CFR Part 73, “Physical Protection of Plants and Materials,” (3150-0002), more specifically 10 CFR 73.55, “Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage.” All power reactor applicants must include a physical security plan demonstrating how they will meet these security requirements when submitting their license application under Part 50 or Part 52. The current physical security framework contains a mixture of performance-based and prescriptive requirements. These requirements and their associated guidance were initially developed for large LWRs and non-power reactors. Accordingly, application of these requirements to future SMRs and non-LWRs may not address advances in safety research and advanced reactor designs that potentially reduce the security risk associated with the operation of these facilities.

The proposed rule provides for five specific alternatives to existing physical security requirements in 10 CFR 73.55. These alternatives include:

1. No minimum number of onsite armed responders
2. Potentially zero onsite armed responders and reliance on offsite law enforcement or other armed responders to interdict and neutralize
3. Alternative means for physical barriers
4. Secondary Alarm Station located offsite
5. Offsite Secondary alarm station/equipment to be a non-vital area

In order for an advanced reactor facility to use the alternatives in the proposed rule, the applicant or licensee of that facility would first have to satisfy the proposed eligibility criterion under new paragraph, 10 CFR 73.55(s)(1). The results of the eligibility analyses would be reported through the license application required in 10 CFR Part 50 or Part 52, depending on the type of license application sought by the applicant, or reported through the change process under 10 CFR 50.54(p). Eligible advanced reactor applicants and licensees could then elect to

implement one or more of the proposed alternative physical security requirements instead of meeting the corresponding existing security requirement.

Affected Sections Containing Information Collections

Table 1 identifies the information collections, broken out by 10 CFR Part, affected by the proposed rule.

Table 1
10 CFR Sections Affected by the Proposed Rule

Section number of new proposed section	OMB clearance number (by Part)
10 CFR Part 50	3150-0011
50.34(c)(4)	
50.54(p)(5)	
10 CFR Part 52	3150-0151
52.79(a)(35)(iii)	
10 CFR Part 73	3150-0002
73.55(s)(1)(iv)	
73.55(s)(2)(ii)(A)(3)	

This supporting statement describes how the proposed rule would impact the information collections in 10 CFR Part 52 (3150-0151). The supporting statements describing changes to 10 CFR Part 50 (3150-0011) and Part 73 (3150-0002) have been submitted under the respective clearances.

Affected Entities

The proposed revisions to 10 CFR Part 73 would affect SMR and non-LWR licensees or license applicants that are subject to 10 CFR 73.55 (i.e., power production nuclear reactors licensed under 10 CFR Part 50 or Part 52). There are currently no licensed SMRs or non-LWRs. This proposed rule and guidance could affect future SMR and non-LWR licensees or license applicants that would be licensed after the effective date of the final rule. The NRC staff estimates a total of ten SMR and non-LWR license applications would be reviewed during the 3-year period covered by this supporting statement, or an average of 3.33 respondents annually. There is one operating license (OL) application (to be licensed under 10 CFR Part 50) with an average of 0.33 applications annually, and nine combined license (COL) applications (to be licensed under 10 CFR Part 52), with an average of three applications annually, expected during this clearance period. The information collections affected by this proposed rule are associated with information submitted as part of an OL or a COL application.

As a result, the NRC staff estimates that the proposed rule would impact 3 respondents annually under Part 52 during the 3-year period covered by this supporting statement.

Information Collections

The changes in the proposed rule would impact reporting requirements associated with the alternative performance-based physical security plan requirements and associated eligibility

analysis requirements in 10 CFR 73.55. The results of the analyses described under 10 CFR 73.55 would be reported through the license application required in 10 CFR Part 50 or Part 52, depending on the type of license application sought by the applicant. Specifically, the new 10 CFR 52.79(a)(35)(iii) would require a Part 52 applicant electing to utilize an alternative physical security requirement under 10 CFR 73.55(s) to submit, as part of its final safety analysis report (FSAR), a description of the technical analysis required by new 10 CFR 73.55(s)(1)(iv) to demonstrate eligibility to use the alternatives. Therefore, this Part 52 supporting statement captures the information collection burden associated with these 10 CFR 73.55 requirements for licensees under 10 CFR Part 52. For licensees under 10 CFR Part 50, the information collection burden associated with these requirements is captured in the Part 50 supporting statement and discussed in more detail there.

A more detailed description of the proposed rule changes is provided at the end of this supporting statement in "Description of Information Collection Requirements."

A. JUSTIFICATION

1. Need for the Collection of Information

The information collection requirements in the proposed rule are a voluntary alternative to certain existing physical security requirements in 10 CFR Part 73. Eligible licensees and applicants would be able to use performance-based alternative physical security requirements.

The information collected under existing Part 52 reporting requirements is needed by the agency to assess the adequacy and suitability of an applicant's site, plant design, construction, training and experience, plans and procedures for the protection of public health and safety. Existing requirements under 10 CFR 52.79(a) require that a COL application contain an FSAR that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components of the facility as a whole. The information collected under existing 10 CFR 52.79(a) reporting requirements is needed in order to determine licensees' and applicants' compliance with the physical security regulations set forth in 10 CFR 73.55.

However, advanced reactor licensees may seek alternative measures for achieving security functions that differ substantially from the approach at the existing fleet of large LWRs, which may lead such licensees to request exemptions from certain physical security regulations. The proposed rule would establish voluntary alternatives to certain physical security requirements under 10 CFR 73.55 for advanced reactor licensees. For Part 52 applicants (seeking a COL), the proposed rule would create a new one-time reporting requirement where applicants must submit, as part of their physical security plans, a description of the technical analysis required under 10 CFR 73.55(s)(1)(iv). The new information collections would ensure the NRC has the necessary information to review whether a Part 52 applicant or licensee has demonstrated that it has met the proposed performance requirement to be eligible to use any of the proposed alternatives. The collected information would also be used by the NRC to review and determine whether the applicant or licensee has met the requirements for each alternative elected.

2. Agency Use and Practical Utility of Information

Applicants or licensees requesting approval to construct or operate utilization or production facilities are required by the Atomic Energy Act of 1954, as amended, to provide information and data that the NRC may determine necessary to ensure the adequate protection of the health and safety of the public. The NRC staff reviews the information included in applications, reports, and records to assess the adequacy of each licensee's physical plant, equipment, organization, training, experience, procedures, and plans for protection of public health and safety and the common defense and security.

The submission of physical security plans to the NRC is required in order to allow the NRC to determine that the physical security plans provide reasonable assurance that a licensee has a physical protection program that can protect against the design basis threat of radiological sabotage.

The proposed rule would provide advanced reactor licensees the option to utilize several (five) predetermined alternative physical security under 10 CFR 73.55. In order to utilize any or all of the alternatives, each advanced reactor licensee must satisfy the proposed eligibility criterion under 10 CFR 73.55(s)(1). The intent of the eligibility criterion is to only allow facilities with radiological risk below a certain level to be able to implement any of the alternatives, which provide the licensee a more flexible and/or reduced means for achieving a level of protection that is equivalent to that under the corresponding existing requirement and commensurate with the risks associated with advanced reactors.

Each Part 52 licensee/applicant (seeking a COL) would be required to submit as part of its physical security plan a description of the technical analysis required under 10 CFR 73.55(s)(1)(iv). Specifically, each applicant/licensee under Part 52 electing to apply an alternative would need to provide a description of the technical analysis used to demonstrate that the consequences of a postulated radiological release resulting from a postulated security initiated event would not exceed the offsite dose reference values defined in 10 CFR 52.79. These new information collections would ensure the NRC has the necessary information to review whether an applicant or licensee has demonstrated that it has met the proposed performance requirement to be eligible to use any of the proposed alternatives. The collected information would also be used by the NRC to review and determine whether the applicant or licensee has met the requirements for each alternative elected. The reporting requirements would allow the NRC to evaluate the adequacy of the alternative physical security program for approval. The information would also be used to update information in the NRC Emergency Operations Center used in support of the NRC's response to an actual emergency, drill, or exercise.

3. Reduction of Burden Through Information Technology

The NRC has issued [Guidance for Electronic Submissions to the NRC](#), which provides direction for the electronic transmission and submittal of documents to the NRC. Electronic transmission and submittal of documents can be accomplished via the following avenues: the Electronic Information Exchange (EIE) process, which is available from the NRC's "Electronic Submittals" Web page; by Optical Storage

Media (OSM) (e.g., CD-ROM, DVD); by facsimile; or by e-mail. It is estimated that approximately 100 percent of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

No sources of similar information are available. There would be no duplication of requirements.

5. Effort to Reduce Small Business Burden

None of the anticipated respondents during the upcoming clearance period meet the NRC's definition of a small entity as defined in 10 CFR 2.810, "NRC size standards." Further, due to the importance of adequate physical security to ensure the common defense and security and the health and safety of the public, regardless of business size, it is not possible to reduce the burden on small businesses by less frequent or less complete reports, records, plans, and procedures.

6. Consequences to Federal Program or Policy Activities if the Collection Is Not Conducted or Is Conducted Less Frequently

If the information is not collected, the NRC would not be in a position to assess whether licensees are operating within the specific security requirements applicable to the licensing and operating activities for advanced reactors.

The information and required frequency from licensees that seek to license and operate SMRs and non-LWRs would be essential to the NRC's determination of whether the licensee or applicant has adequate equipment, training, funds, and experience throughout the life of the license to protect the facility and thus protect public health and safety. If the information were not collected, or collected less frequently, the NRC could be unaware for an extended period of time that an existing or revised security plan is no longer adequate to protect the facility or the health and safety of the public and the environment.

7. Circumstances Which Justify Variation from OMB Guidelines

The proposed revisions to Part 52 would not conflict with OMB Guidelines.

8. Consultations Outside the NRC

Regulatory Basis Issued

On July 16, 2019, the NRC issued a regulatory basis for a 30-day public comment period (84 FR 33861). In the regulatory basis, the NRC requested feedback from the public on questions related to the scope of the proposed rule, risk-informed approach, regulatory impacts, and cumulative effects of regulation (CER).

The NRC received nine comment submissions on the regulatory basis. The staff considered those comment submissions and the discussions from the public meetings as it developed this proposed rule.

General Public

The staff held several public meetings during the drafting of the proposed rule to request feedback from interested stakeholders on a potential risk-informed alternatives rulemaking for physical security for advanced reactors. Based on the feedback received from the stakeholders, the NRC performed several revisions of the preliminary proposed rule language. The Nuclear Energy Institute submitted several comments in response to information presented at two of the public meetings.

In addition to holding public meetings, the staff released three preliminary proposed rule language documents over the course of the proposed rule development.

The NRC will provide another opportunity for public comment when the proposed rule is published. The NRC staff will issue the draft implementing guidance with the proposed rule and draft regulatory analysis to support more informed external stakeholder feedback. Further, the NRC staff plans to hold public meetings throughout the rulemaking process. Any comments related to information collection requirements in the proposed rule will be addressed at the final rule stage.

Tribes and Agreement States

Consistent with the Tribal Policy Statement principles to guide the agency's Government to Government interactions with American Indian and Alaska Native Tribes, the NRC sent a State and Tribal Communication (STC) letter to all the Tribal nations and states. This letter served to provide additional notification to the Tribal nations of the upcoming proposed rule and how they can participate to provide comments.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b). However, no information normally considered confidential or proprietary is requested.

11. Justification for Sensitive Questions

The proposed regulations do not request sensitive information.

12. Estimated Burden and Burden Hour Cost

The estimated number of annual respondents is 3.

The estimated burden increase is 1,002 hours for reporting requirements at an estimated annual cost increase of \$288,576 (1,002 hrs x \$288/hr).

**Table 2
Total Burden Summary (10 CFR Part 52)**

ONE-TIME REPORTING							
10 CFR Section	Description	Annualized Number of Respondents	Number of Responses Per Respondent	Total Annual Responses	Burden Hrs Per Response (Hrs)	Total Annual Burden (Hrs)	Cost @ \$288/Hr (\$)
10 CFR 52.79(a)(35)(iii)	Description of the technical analysis required by § 73.55(s)(1)(iv) to demonstrate eligibility to use alternative performance-based physical security plan requirements (submitted with application)	3	1	3	334	1,002	\$288,576

The \$288 hourly rate used in the burden estimates is based on the NRC's fee for hourly rates as noted in 10 CFR 170.20, "Average cost per professional staff-hour." For more information on the basis of this rate, see the Revision of Fee Schedules; Fee Recovery for Fiscal Year 2021 (86 FR 32146; June 16, 2021).

13. Estimate of Other Additional Costs

There are no additional costs. Costs remain unchanged at \$1,536.

14. Estimated Annualized Cost to the Federal Government

The staff has developed estimates of annualized costs to the Federal Government related to the conduct of this collection of information. These estimates are based on staff experience and subject matter expertise and include the burden needed to review, analyze, and process the collected information and any relevant operational expenses. The staff expects the review burden for performance-based alternative physical security plans to decrease after this clearance period based on increased familiarity of reviews and subsequent submittals incorporating lessons learned.

Burden assumptions

For this clearance period, the staff assumes the review burden for a deterministic physical security plan and performance-based alternative physical security plan to be the same.

The NRC's average annual burden associated with the information collections is given in Table 3 (Annualized NRC Cost). The annualized cost to the government is estimated to be \$259,200 (900 hours x \$288/hour).

Table 3
Annualized NRC Cost

Section	NRC Action Description	No. of Actions/Year	Burden Hours/Action	Total Burden Hours	Total Cost
52.79(a)(35)(iii)	Reviewing description of the technical analysis required by § 73.55(s)(1)(iv) to demonstrate eligibility to use alternative performance-based physical security plan requirements (submitted with application)	3	300	900	\$259,200

The current cost to the Federal government for Part 52 information collection is \$11,736,010. With an increase of \$259,200 from the proposed rule, the new cost to the Federal government would be \$11,995,210.

15. Reasons for Change in Burden or Cost

The proposed rule would increase the burden for the Part 52 information collection by 1,002 hours, from 307,465 hours to 308,467 hours.

The estimated change to the reporting burden is an increase of 1,002 hours due to the proposed rule requiring future Part 52 licensees that choose to utilize the alternative performance-based physical security plan to submit, as part of their FSAR, a description of the technical analysis required by 10 CFR 73.55(s)(1)(iv).

16. Publication for Statistical Use

Not applicable. The information being collected is not expected to be published for statistical use.

17. Reason for Not Displaying the Expiration Date

The reporting requirements for this information collection are associated with regulations and are not submitted on instruments such as forms or surveys. For this reason, there are no data instruments on which to display an OMB expiration date. Further, amending the regulatory text of the CFR to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

DESCRIPTION OF INFORMATION COLLECTION REQUIREMENTS CONTAINED IN THE
ALTERNATIVE PHYSICAL SECURITY REQUIREMENTS FOR ADVANCED REACTORS
PROPOSED RULE
10 CFR PART 52

The 10 CFR Part 52, "Licenses, Certifications, and Approvals For Nuclear Power Plants" (3150-0151) information collection requirements that would be impacted by the proposed rule are discussed below.

10 CFR 52.79(a)(35)(i) requires that a COL applicant describe within the FSAR the physical security plan, consistent with requirements in 10 CFR Part 73, "Physical Protection of Plants and Materials." The proposed rule would revise the physical security requirements contained under 10 CFR Part 73, more specifically 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage." The current physical security framework contains a mixture of performance-based and prescriptive requirements. These requirements and their associated guidance were initially developed for large LWRs and non-power reactors. Accordingly, application of these requirements to future SMRs and non-LWRs may not address advances in safety research and advanced reactor designs that potentially reduce the security risk associated with the operation of these facilities. The proposed rule provides for five specific alternatives to existing physical security requirements in 10 CFR 73.55. These alternatives include:

1. No minimum number of onsite armed responders
2. Potentially zero onsite armed responders and reliance on offsite law enforcement or other armed responders to interdict and neutralize
3. Alternative means for physical barriers
4. Secondary Alarm Station located offsite
5. Offsite Secondary alarm station/equipment to be a non-vital area

The proposed rule also would add new requirements in 10 CFR 73.55(s)(2)(ii)(A)(4)-(5) related to an applicant's safeguards contingency plan. Applicants who elect to use the proposed alternative of relying on law enforcement or other offsite armed responders to fulfill the interdiction and neutralization functions would be required to identify and plan for the role of law enforcement or other offsite armed responders in a safeguards contingency event. Because the NRC assumes that the reporting burden associated with the existing deterministic physical security plan and safeguards contingency plan is equivalent to the reporting burden for the new performance-based alternative requirements, this proposed change would not have an impact on this reporting burden. (No change)

10 CFR 52.79(a)(35)(iii) would add a new reporting requirement specifying that Part 52 applicants (seeking a COL) that elect to implement on alternative performance-based physical security plan requirements must submit, as part of their FSAR, a description of the technical analysis required by 10 CFR 73.55(s)(1)(iv) relating to eligibility to use the alternatives. There is a reporting burden associated with this requirement, which would be imposed at the time the future licensee submits its license application under Part 52 or submits a change under 10 CFR 50.54(p). (New)