1DRAFT SUPPORTING STATEMENT FOR

INFORMATION COLLECTIONS CONTAINED IN THE ALTERNATIVE PHYSICAL SECURITY REQUIREMENTS FOR ADVANCED REACTORS PROPOSED RULE

10 CFR PART 73 PHYSICAL PROTECTION OF PLANTS AND MATERIALS

(OMB Clearance No. 3150-0002) 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

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OMB clearance
number (by Part)
3150-0011
3150-0151
3150-0002

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. As shown in Table 2, 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 3.33 respondents annually under Part 73 during the 3-year period covered by this supporting statement.

Table 2
Annual Respondents by 10 CFR Part (2024-2026)

Part 50 (OL)	0.33
Part 52 (COL)	3
Part 73 (all)	3.33

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. However, because 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, the information collection burden associated with these requirements is captured in the Part 50 or Part 52 supporting statements and discussed in more detail there.

The changes in the proposed rule would also impact recordkeeping and third-party disclosure information collection requirements that are captured in this Part 73 supporting statement. Specifically, the proposed rule would establish in 10 CFR 73.55(s)(1)(iv) a new recordkeeping requirement for licensees or applicants to make available for audit or inspection the technical analysis related to the eligibility criterion in new 10 CFR 73.55(s)(1)(ii), and maintain the analysis until the certifications of the cessation of operations required by 10 CFR 50.82(a)(1) or 10 CFR 52.110(a) have been submitted to the NRC. Furthermore, the proposed rule would establish in 10 CFR 73.55(s)(2)(ii)(A)(3) a new third-party disclosure requirement for Part 50 and Part 52 licensees to make available periodic familiarization training and facility information to offsite law enforcement.

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 new recordkeeping requirement would ensure that the NRC can maintain proper oversight and enforcement, as well as give the NRC the up-to-date information that it needs to review whether an applicant or licensee has demonstrated that it has met the eligibility requirements to use any of the alternative physical security requirements. The new third-party disclosure requirements would provide necessary training and information about the facility to offsite law enforcement so that they are prepared in the future if called upon to fulfill the interdiction and neutralization functions for threats up to and including the design-basis threat (DBT) of radiological sabotage.

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 (AEA), 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 proposed rule would provide advanced reactor licensees the option to utilize several (five) predetermined alternative physical security requirements 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. The proposed rule would require licensees to make available for audit or inspection the technical analysis demonstrating they meet the eligibility criterion, and maintain the analysis until the certifications required by 10 CFR 50.82(a)(1) or 10 CFR 52.110(a) have been docketed by the NRC. The information collected under this requirement would be used by the NRC to assess whether the licensee is eligible to use any of the proposed alternative security requirements. The proposed rule would also require licensees to make available periodic familiarization training and facility information to offsite law enforcement. The training and information received would be used by offsite law enforcement in the event that they were called upon to fulfill the interdiction and neutralization functions for threats up to and including the DBT of radiological sabotage.

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.

The proposed rule would not impact the proportion of documents submitted to the NRC electronically (90%).

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. <u>Consequences to Federal Program or Policy Activities if the Collection Is Not</u> Conducted or Is Conducted Less Frequently

If the information is not collected, the NRC would not be in a position to assess whether licensees qualify to operate 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

There are variations from OMB guidelines. The proposed rule contains requirements, consistent with current security requirements, to retain certain recordkeeping documents throughout the life of a license. An advanced reactor facility would be required to have a site-specific security plan maintained until the license is terminated. This would include records related to the security program, the security plan(s), changes to security plans, training and exercise records, and communications with offsite authorities. By maintaining these records throughout the life of the facility, the NRC can maintain proper oversight and enforcement, to include inspections, as well as give the NRC the up-to-date information it needs to be able to effectively and accurately monitor any security-related event at the facility. Based on its authority under the AEA, the Commission determined that these requirements are necessary for advanced reactor facilities to provide for the public health and safety.

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 Ouestions

The proposed regulations do not request sensitive information.

12. Estimated Burden and Burden Hour Cost

The estimated number of annual respondents is 3.33.

The overall estimated burden increase is 8,325 hours at an estimated annual cost increase of \$2,397,600 (8,325 hrs x \$288/hr). This includes a burden increase of 8,325 hours for recordkeeping and a burden increase of 0 hours for third-party disclosures, because no respondents are anticipated for this requirement during the clearance period. There is no estimated change in annual reporting because the reporting burden associated with the alternative performance-based physical security plan requirements and associated eligibility analysis requirements in 10 CFR 73.55 are captured in the estimated burdens in the Part 50 and Part 52 supporting statements.

Table 3
Total Burden Summary (10 CFR Part 73)

DECORDIVE EDING										
RECORDKEEPING										
10 CFR Section	Description	Annualized Number of Recordkeepers*			Burden Hrs Per Recordkeeper (Hrs)	Total Annual Burden (Hrs)	Cost @ \$288/Hr (\$)			
73.55(s)(1)(iv)	Physical security alternatives - eligibility criterion analysis				2,500	8,325	\$2,397,600			
THIRD PARTY										
10 CFR Section	Description	Annualized Number of Respondents	Number of Responses Per Respondent	Total Annual Response s	Burden Hrs Per Response (Hrs)	Total Annual Burden (Hrs)	Cost @ \$288/Hr (\$)			
73.55(s)(2)(ii) (A)(3)	Physical security alternatives - provide necessary information about the facility and make available periodic training to law enforcement or other offsite armed responders	0	2	0	100	0	\$0			
TOTAL		3.33		3.33		8,325	\$2,397,600			

^{*}Each recordkeeper is counted as a single response.

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

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be \$959 (8,325 recordkeeping hours x \$288/hour x .0004). The current additional costs are \$553,289. The additional costs including the proposed rule requirements would be \$554,248.

14. Estimated Annualized Cost to the Federal Government

The NRC staff do not anticipate any costs to the NRC associated with the recordkeeping and third-party disclosure requirements addressed in this supporting statement. The NRC staff costs associated with the review, analysis, and processing of the alternative performance-based physical security plan and associated eligibility analysis in 10 CFR 73.55 are covered in the Part 50 and Part 52 supporting statements. Therefore, the cost to the Federal Government captured in this supporting statement remains unchanged at \$1,255,500.

15. Reasons for Change in Burden or Cost

The proposed rule would increase the burden for the Part 73 information collection by 8,325 hours, from 501,471 hours to 509,796 hours.

The estimated change to the recordkeeping burden is an increase of 8,325 due to the proposed rule requiring future Part 50 and Part 52 licensees that choose to utilize the alternative performance-based physical security plan to maintain the technical analysis related to the eligibility criterion in 10 CFR 73.55(s)(1)(ii) until the certifications required by 10 CFR 50.82(a)(1) or 10 CFR 52.110(a) have been docketed by the NRC.

The estimated change to the third-party disclosure burden is an increase of 0 hours because the NRC staff does not expect that during the clearance period any Part 50 or Part 52 licensees, which choose to utilize the alternative performance-based physical security plan and fulfill interdiction and neutralization functions using law enforcement, to be far enough along in the construction process to trigger the requirement to make available periodic familiarization training and facility information to offsite law enforcement. However, an increase in burden is anticipated in the future when these licensees would be closer to finishing construction and beginning operation.

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 recordkeeping and third-party disclosure 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 ALERNATIVE PHYSICAL SECURITY REQUIREMENTS FOR ADVANCED REACTORS PROPOSED RULE 10 CFR PART 73

The 10 CFR Part 73, "Physical Protection of Plants and Materials" (3150-0002) information collection requirements that would be impacted by the proposed rule are discussed below.

10 CFR 73.55(s) would contain performance-based alternative physical security requirements for SMRs or non-LWRs. The current physical security framework contains a mixture of performance-based and prescriptive requirements and consists of meeting 10 CFR 73.55 and meeting Appendix B to 10 CFR Part 73. The new performance-based alternatives would provide a means for an advanced reactor (SMR or non-LWR) applicant to provide more flexible and/or reduced means for achieving a similar level of physical security commensurate with the risks associated with advanced reactors, for those particular alternatives identified in the proposed rule, granted the applicant meets the requirements set forth in 10 CFR 73.55(s)(1). 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
- 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

For this clearance period, the NRC expects that all of the applicants would elect to use all of the proposed five new alternatives. There is a reporting burden associated with these requirements, which is imposed at the time the future licensee submits its license application under Part 50 or Part 52 or submits a change under 10 CFR 50.54(p). Depending on whether the applicant is submitting under Part 50 or Part 52, the burden for these requirements has been captured under the Part 50 (OMB clearance number 3150-0011) or Part 52 (OMB clearance number 3150-0151) supporting statements. Additional details about these information collection requirements are in the Part 50 and Part 52 supporting statements. (New)

10 CFR 73.55(s)(1)(iv) would add a requirement for licensees or applicants to make available for audit or inspection the technical analysis related to the eligibility criterion in 10 CFR 73.55(s) (1)(ii) and maintain the analysis until the certifications required by 10 CFR 50.82(a)(1) or 10 CFR 52.110(a) have been docketed by the NRC. There is a reporting burden associated with the requirement to prepare the technical analysis related to the eligibility criterion, which would be imposed at the time a future applicant submits its license application under Part 50 or Part 52. Depending on whether the applicant is submitting under Part 50 or Part 52, the reporting burden for this has been captured under the Part 50 or Part 52 supporting statements. There is also a recordkeeping burden associated with this requirement, which is captured in this supporting statement. (New)

10 CFR 73.55(s)(2)(ii)(A)(3) would add a requirement to provide necessary information about the facility and make available periodic training to law enforcement or other offsite armed responders to fulfill the interdiction and neutralization functions for threats up to and including the DBT of radiological sabotage. There is a third-party disclosure burden associated with this requirement. (New)

10 CFR 73.55(s)(2)(ii)(A)(4)-(5) would add a requirement for applicants who elect the proposed alternative of relying on law enforcement or other offsite armed responders to fulfill the interdiction and neutralization functions to identify and plan for the role of law enforcement or other offsite armed responders in a safeguards contingency event. There is a reporting burden associated with these requirements, which is imposed at the time the future licensee submits its license application under Part 50 or Part 52 or submits a change under 10 CFR 50.54(p). Depending on whether the applicant is submitting under Part 50 or Part 52, the burden for these requirements has been captured under the Part 50 (OMB clearance number 3150-0011) or Part 52 (OMB clearance number 3150-0151) supporting statements. Additional details about these information collection requirements are in the Part 50 and Part 52 supporting statements. (New)