

Rulemaking for Enhanced Security of Special Nuclear Material

RIN: 3150-AJ41

NRC Docket ID: NRC-2014-0118

Revised Regulatory Basis – Draft for Public Comment



January 2019

Table of Contents

1. Introduction	1
2. Changes in Rulemaking Scope.....	2
3. Regulatory Problem	3
3.1 Security Orders to Facilities with Category I Quantities of SNM	3
3.2 Security Orders to Facilities with Category III Quantities of SNM	4
4. Basis for Proposed Changes	5
4.1 Changes for Category I Quantities of SNM.....	5
4.2 Changes for Category III Quantities of SNM.....	9
4.3 Changes to Regulatory Guidance	9
5. Alternatives to Rulemaking.....	9
5.1 No Action.....	10
5.2 Revise Existing Regulatory Guidance Documents.....	10
6. Backfit Rule Applicability	10
7. Stakeholder Interaction	11
8. Cost/Impact Considerations	11
8.1 Applicability	12
8.2 Potential Licensee Impacts	12
8.3 Impact on the NRC.....	12
8.4 Impact on State, Local, or Tribal Governments and Agreement State Licensees.....	12
8.5 Environmental Analysis	12
9. NRC Strategic Plan	12
10. Resources	14
11. Timing	14
12. References.....	14

DRAFT FOR PUBLIC COMMENT
REVISED REGULATORY BASIS FOR A RULEMAKING TO ENHANCE
THE SECURITY OF SPECIAL NUCLEAR MATERIAL

1. Introduction

The U.S. Nuclear Regulatory Commission (NRC) is revising the scope of a planned rulemaking to enhance security of special nuclear material (SNM). This rulemaking would amend requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 73, “Physical Protection of Plants and Materials” relating to physical protection of SNM at NRC-licensed facilities and in transit. The specific objective of this rulemaking is to update SNM physical protection requirements for fuel cycle facilities to establish generically applicable security requirements similar to those imposed by security orders issued by the NRC following the terrorist attacks of September 11, 2001 (post-9/11 security orders).

In May 2014, the NRC published a draft regulatory basis for this rulemaking titled “Rulemaking for Enhanced Security at Fuel Cycle Facilities; Special Nuclear Material Transportation; Security Fatigue at Nuclear Facilities,” in the *Federal Register* (NRC, 2014). Based on the public comments received on this document, the NRC developed the final regulatory basis titled “Rulemaking for Enhanced Security of Special Nuclear Material” (NRC, 2015) (2015 regulatory basis). The Commission recently directed that resources be allocated for this rulemaking with the exclusive scope of codifying the requirements of the post-9/11 security orders.

Consistent with this direction and the NRC’s rulemaking process, the staff has prepared this revised regulatory basis to describe and document the results of assessments and analyses performed by the NRC in support of the proposed rule for enhanced security of SNM.

Within the context of the revised scope of the SNM rulemaking, this revised regulatory basis:

- Explains why the existing regulations or policies need to be revised to address identified regulatory issues as discussed in Section 3, “Regulatory Problem”;
- Explains how a change in the regulations can resolve the issue and identifies a number of different approaches that could address the regulatory issue;
- Explains why alternatives to rulemaking cannot resolve the problem and addresses other options considered and why they were not pursued;
- Provides the scientific, policy, legal, or technical information that supports the decision to undertake rulemaking;
- Discusses backfit considerations, as appropriate;
- Discusses stakeholder interactions in developing the technical portion of the regulatory basis and stakeholder views, to the extent known;
- Explains how the recommended rulemaking will support the NRC’s Strategic Plan goals; and

- Explains any limitations on the scope and quality of the regulatory basis, such as known uncertainties in the data or methods of analysis.

This revised regulatory basis also presents plans to revise guidance to support the rule and lists documents that have been cited or otherwise factored into the development of this document. Consistent with NRC policy and procedures, this revised regulatory basis does not include proposed regulatory text or a section-by-section analysis of current versus proposed regulations.

The scope of the proposed rulemaking includes fuel cycle facilities and other facilities licensed under 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," that possess Category I or Category III quantities of SNM. Also within the scope are facilities that are required to protect Category III quantities of SNM in accordance with 10 CFR 73.67, "Physical protection of special nuclear material of moderate and low strategic significance." These include holders of a Certificate of Compliance issued under 10 CFR Part 76, "Certification of Gaseous Diffusion Plants,"¹ non-power production and utilization facilities, and certain Agreement State licensees pursuant to 10 CFR 150.14, "Commission regulatory authority for physical protection."

2. Changes in Rulemaking Scope

The 2015 regulatory basis set forth four objectives for the rulemaking: (1) make generically applicable physical protection measures similar to those imposed by the post-9/11 security orders; (2) consider risk insights gained from new National Laboratory studies, implementation and oversight experience, and international guidance; (3) improve consistency and clarity of SNM physical protection requirements; and (4) use a risk-informed and performance-based structure. Of those four objectives, the NRC now is pursuing only the first objective in the scope of the rulemaking. To help stakeholders understand the impact of the changes to the scope of the SNM rulemaking, the following is a summary of key changes between the 2015 regulatory basis and the revised scope of changes addressed in this regulatory basis.

- **Only licensees with Category I and Category III quantities of SNM will be affected.** Licensees with Category II quantities of SNM did not receive post-9/11 security orders and, therefore, will not be included within the revised scope of facilities affected by the SNM rulemaking. In addition, security orders issued to facilities with Category I quantities of SNM prior to September 11, 2001, and security orders issued to other facilities after September 11, 2001, that were not a result of the terrorist attacks, will not be included in the revised scope of the SNM rulemaking. The rulemaking also will not consider measures issued to non-power production and utilization facilities in confirmatory action letters.
- **Transportation security regulations will remain the same.** The 2015 regulatory basis proposed changes to the transportation security regulations for SNM. The

¹ The NRC currently has no licensees in this category.

post-9/11 security orders did not pertain to transportation of SNM; accordingly, transportation security will not be included in the revised scope of the SNM rulemaking.

- **Material attractiveness² will not be considered.** The 2015 regulatory basis proposed establishing tiered performance objectives, protective strategies, and specific physical protection requirements based on the dilution of SNM. These proposed changes will not be included in the revised scope of the SNM rulemaking.
- **Other regulatory changes based on risk insights, implementation and oversight experience, and international guidance will not be considered in the rulemaking.** The 2015 regulatory basis proposed that licensees with Category I quantities of SNM perform an insider risk analysis, explicitly considered sabotage scenarios, considered external dose rate as a security feature, considered plutonium in-growth in irradiated material, and also proposed consideration of safety-safeguards interfaces. These proposed changes will not be included in the revised scope of the SNM rulemaking.

3. Regulatory Problem

This section discusses objectives of the rulemaking by providing background on the post-9/11 security orders and the aspects of those orders that the NRC proposes to make generically applicable in the NRC's regulations. For additional background information, see Section 2 of the 2015 regulatory basis, which presented the regulatory history and chronology of the physical protection of SNM.

In the aftermath of the September 11, 2001 terrorist attacks, the Commission determined that current regulations alone were insufficient to provide adequate protection of public health and safety and common defense and security in light of the new threat environment, and that licensees should implement new security requirements to address this changed threat environment. The Commission further determined that these new security requirements should be implemented through orders rather than rulemaking, to expedite licensee implementation of the requirements. In 2006, the Commission approved the staff's proposal to incorporate security requirements similar to the security orders into regulations to make those requirements generically applicable.

3.1 Security Orders to Facilities with Category I Quantities of SNM

In 2002, the NRC issued orders for Interim Compensatory Measures to Category I fuel cycle facilities to increase the physical protection at these facilities. In general, the enhanced physical protection measures resulting from the security orders included increased security patrols, augmented security forces and capabilities, additional security posts, additional physical barriers to include vehicle barriers, additional intrusion detection capability, vehicle searches at greater stand-off distances, additional random and mandatory personnel and package searches, and more restrictive site access controls for personnel. The orders also included evaluation and protection of computer and digital assets; enhanced coordination with local law enforcement

² Material attractiveness considers the usability of SNM in the creation of an improvised nuclear device and permits risk-informed approaches to formulate SNM physical protection requirements.

agencies and other governmental agencies; actions to be taken for an imminent threat; and augmented security and emergency response training, equipment, and communication.

In 2003, the NRC issued design basis threat orders to Category I fuel cycle facilities to amend the general adversary characteristics against which licensees must defend at these facilities. In addition to the general adversary characteristics, the design basis threat orders included requirements to mitigate insider threats. These security orders contain information that is classified National Security Information and, therefore, those measures are not discussed in detail in this revised regulatory basis. In 2007, the general adversary characteristics were amended in the design basis threat final rule (72 FR 12705; March 19, 2007). The design basis threat rule defined the threat against which a licensee must be able to defend in order to ensure adequate protection of the public health and safety and common defense and security. The scope of the 2007 design threat basis rule was limited to updating the general provisions in 10 CFR 73.1 and included codifying the general adversary characteristics, addressing PRM-73-12 (69 FR 64690; November 8, 2004) related to revision of certain design basis threat provisions, and addressing direction to the NRC in the Energy Policy Act of 2005. Given the limited scope of the design basis threat rulemaking, the final rule did not include provisions for mitigating insider threats that were included in the design basis threat orders. Specifically, these insider threat requirements include a human reliability program consisting of access authorization, fitness for duty determinations, initial and periodic medical assessment, periodic supervisor review, and periodic reinvestigation. These provisions, which are part of the design basis threat orders issued post-9/11, were not codified in the 2007 design basis threat rulemaking and therefore are included in this rulemaking.

Certain post-9/11 security order requirements will not be included in the rulemaking. For example, some of the classified order requirements issued to Category I facilities are not suitable for codification in public regulations because public knowledge of those physical protection measures could benefit an adversary. Other order requirements are not related to physical protection of SNM and are therefore outside the scope of this rulemaking. These aspects of the orders that are not included in the rulemaking will remain in place in the orders.

3.2 Security Orders to Facilities with Category III Quantities of SNM

In 2003, the NRC issued orders for Interim Compensatory Measures to Category III fuel cycle facilities to increase the physical protection at these facilities. In general, these Interim Compensatory Measures included: 1) response requirements relating to response procedures and coordination with local law enforcement agencies; and 2) general requirements relating to placement of hazardous materials, review and update of emergency procedures, evaluation and protection of computer and digital assets, consideration of off-site medical and fire support, and limitation of access to sensitive facility information. The Interim Compensatory Measures required, in part, that licensees assess the potential for lethal exposures to members of the public from radiological material or chemicals subject to NRC regulations, based on site-specific conditions, and protect those materials that could result in exposures above certain limits. Areas that contained material that could cause lethal exposures were termed "critical target areas." In these cases, licensees were required to implement requirements including increased physical barriers, security patrols, access controls, and searches.

The security orders contain measures that are controlled as Safeguards Information; therefore, those measures are not discussed in detail in this regulatory basis. The staff does not propose to include certain aspects of the 2003 Interim Compensatory Measures orders. Licensees performed assessments of the potential for lethal exposures to members of the public from radiological materials or chemicals subject to NRC regulations. Based on these assessments, affected licensees determined that no critical target areas were present at their facilities. In addition, in SRM-SECY-11-0108 (NRC, 2012), the Commission disapproved the staff's recommendation to proceed with rulemaking for increased chemical security at NRC-licensed facilities. Therefore, the staff is not proposing to include order requirements associated with the protection of material based on chemical hazards into the regulations. Moreover, protection of digital assets and systems is being considered as part of a separate rulemaking and is, therefore, outside the scope of this rulemaking. Other order requirements are not related to physical protection of SNM and are therefore outside the scope of this rulemaking.

4. Basis for Proposed Changes

This section describes the desired changes associated with the general discussion of the post-9/11 security orders in Section 3, "Regulatory Problem." The NRC is proposing to make certain provisions of security orders generically applicable in this SNM rulemaking. This will increase agency transparency and regulatory clarity. The proposed changes are consistent with the NRC's strategic goal (see Section 9, "NRC Strategic Plan") and will ensure adequate protection against radiological sabotage and theft or diversion scenarios associated with malevolent use of SNM.

After the post-9/11 security orders were issued, the NRC performed security assessments to determine if any gaps or deficiencies in physical protection requirements existed at various licensed facilities. The results of the security assessments were used to confirm the effectiveness of the security orders and to determine whether the NRC should take additional actions to ensure adequate protection of materials and to promote common defense and security. The NRC determined that the security order requirements, which supplement existing physical protection regulatory requirements, continue to provide adequate protection in the current threat environment. That is, licensee implementation of the security requirements imposed by the post-9/11 security orders and the existing physical protection regulations ensure that licensees establish and maintain an appropriate level of protection to manage the risk that the SNM could be used for malicious purposes given the current threat environment.

The NRC's practice is to withdraw applicable security orders if all of the requirements of the security orders are incorporated in a final rule once the rule has become effective. Some requirements of the security orders, because of their sensitive nature, will not be withdrawn because they will not be captured in a rulemaking. Alternatively, the NRC may relax portions of a security order if only a portion of the security order is addressed by the final rule. The staff plans to inform licensees which security orders will be withdrawn or which portions of a security order will be relaxed.

4.1 Changes for Category I Quantities of SNM

The following presents provisions of the 2002 Interim Compensatory Measures and 2003 design basis threat orders, by regulatory section, that the staff proposes to incorporate into

10 CFR 73.46, "Fixed site physical protection systems, subsystems, components, and procedures."

10 CFR 73.46(c), "Physical barrier subsystems"

- Design, construct, install and maintain a vehicle barrier system to include passive and active barriers, at a stand-off distance adequate to protect personnel, material access areas, storage vaults, and systems.
- Where rail access is provided into the protected area, additional measures including installing a train derailer, removing a section of track, or restricting access to railroad sidings, must be provided.
- Identify areas from which a waterborne vehicle must be restricted and install buoys, markers or other equipment to restrict access. Periodically monitor and observe water approaches.

10 CFR 73.46(d), "Access control subsystems and procedures"

Access Control

- Where physical barriers are provided in the owner-controlled area, implement search procedures for access control points in the barrier. Develop and implement procedures for vehicle search at vehicle access portals to include searching the cab, engine compartment, under carriage, and cargo areas, as appropriate. At least two (2) trained and equipped security personnel, one of whom must be armed, must perform vehicle searches. An additional armed individual must be positioned to observe the search process and provide immediate response.
- Vehicle searches must be accomplished through the use of equipment capable of detecting explosives, incendiary devices, or other items which could be used to aid in theft or diversion or radiological sabotage, or through visual and physical searches, or both, to ensure that all items are identified before granting access. Vehicle access control points must be equipped with video surveillance equipment that is monitored by an individual capable of initiating a response.
- Packages larger than an X-ray scanner must be scanned for explosives using a method equal to or greater than that achieved by X-ray scanning.

Human Reliability Program

- Establish, maintain, and implement a human reliability program and describe the program in the Physical Security Plan.
- The human reliability program must monitor the initial and continuing trustworthiness and reliability of individuals granted or retaining unescorted access authorization to a protected, material access, or vital area, and implement defense-in-depth methodologies to minimize the potential for an insider to adversely affect, either directly or indirectly, the

licensee's capability to prevent the theft or diversion and radiological sabotage. The human reliability program and associated measures may be graded to require more robust measures for material access areas and vital areas.

- The human reliability program must contain elements from (1) the access authorization program described in 10 CFR Part 11, "Criteria and Procedures for Determining Eligibility for Access to or Control Over Special Nuclear Material"; (2) the fitness-for-duty program described in 10 CFR Part 26, "Fitness for Duty Programs"; (3) the physical protection program described in 10 CFR 73, "Physical Protection of Plants and Materials"; and (4) checks and balances sufficient to detect falsification and reports that could conceal diversion described in 10 CFR Part 74, "Material Control and Accounting of Special Nuclear Material." In meeting these requirements, the human reliability program must consider and be harmonized with programs required by other Federal agencies (e.g., the Department of Energy).

Behavioral Observation Program

- Include in access authorization programs, a behavioral observation program that is designed to detect behaviors or activities that may constitute an unreasonable risk to the health and safety of the public and common defense and security, including a potential threat to commit theft, diversion, or radiological sabotage.
- Ensure that individuals granted unescorted access to the protected, material access, or vital areas are subject to behavioral observation applicable to that security area.
- Each person subject to the behavioral observation program must be responsible for communicating to the licensee observed behaviors of individuals subject to the behavioral observation program. Such behaviors include any behavior of individuals that may adversely affect the safety or security of the facility or that may constitute an unreasonable risk to the public health and safety or the common defense and security, including a potential threat to commit theft, diversion, or radiological sabotage.
- Ensure that individuals who are subject to the behavioral observation program successfully complete initial behavioral observation training and requalification behavioral observation training. The training program must be graded based on the duties and responsibilities of the individual and the security areas to which they have unescorted access. Require remedial training and re-testing for managers and supervisors who fail to satisfactorily complete the examination. Require refresher training on a nominal 12-month frequency, or more frequently where the need is indicated. Individuals may take and pass a comprehensive examination in lieu of completing annual refresher training.
- Individuals who are subject to an access authorization program must, at a minimum, report any concerns arising from behavioral observation, including, but not limited to, concerns related to any questionable behavior patterns or activities of others to his or her supervisor, or other management personnel designated in their site procedures. Reassess the reported individual's unescorted access or unescorted access authorization status. Determine the elements of the reassessment based on the

accumulated information pertaining to the individual. If there is a reason to believe that the reported individual's trustworthiness or reliability is questionable, either administratively withdraw or terminate the individual's unescorted access or unescorted access authorization while completing the reevaluation or investigation.

Self-reporting of Legal Actions

- Any individual who has applied for unescorted access or unescorted access authorization or is maintaining unescorted access or unescorted access authorization, must promptly report to his or her supervisor, or other management personnel designated in site procedures, any legal action(s) taken by a law enforcement authority or court of law to which the individual has been subject that could result in incarceration or a court order or that requires a court appearance, including but not limited to an arrest, an indictment, the filing of charges, or a conviction, but excluding minor civil actions or misdemeanors such as parking violations or speeding tickets. On the day that the report is received, evaluate the circumstances related to the reported legal action(s) and re-determine the reported individual's unescorted access or unescorted access authorization status.
- Inform the individual of this obligation, in writing, prior to granting unescorted access or certifying unescorted access authorization.

10 CFR 73.46(e), "Detection, surveillance and alarm subsystems and procedures"

- Ensure the detection, assessment, communication, and response functions cannot be disabled by a single act in the event of a loss of power.
- Periodic inspection by armed security patrols of material access areas, including physical barriers, must be conducted. In addition, foot patrols must be capable of responding to threats within the protected area.

10 CFR 73.46(h), "Contingency and response plans and procedures"

- Determine the minimum number of tactical response team members to satisfy the general performance objectives and requirements and implement the protective strategy. This number must be documented in security plans and must not be less than eight.
- Document and maintain current an integrated response plan with local law enforcement agencies, State, and Federal resources.
- Establish, maintain, and implement a threat warning system that identifies specific graduated protective measures and actions to be taken to increase licensee preparedness against a heightened security threat.

4.2 Changes for Category III Quantities of SNM

The following presents aspects of the 2003 Interim Compensatory Measures orders, by regulatory section, that the staff proposes to incorporate into 10 CFR 73.67.

10 CFR 73.67(f), “Fixed site requirements for special nuclear material of low strategic significance”

- To the extent practicable, document and maintain current agreements with applicable law enforcement agencies to include estimated response times and capabilities.
- Establish, maintain, and implement a threat warning system that identifies specific graduated protective measures and actions to be taken to increase licensee preparedness against a heightened security threat.

4.3 Changes to Regulatory Guidance

Regulatory guides describe acceptable methods for complying with specific parts of the NRC's regulations, techniques used by the staff in evaluating specific problems or postulated accidents, and data needed by the staff in its review of applications for permits or licenses. The principal guidance documents used in licensing facilities possessing Category I or Category III quantities of SNM are Regulatory Guide 5.52, “Standard Format and Content of a Licensee Physical Protection Plan for Strategic Special Nuclear Material at Fixed Sites” (NRC, 1994), and Regulatory Guide 5.59, “Standard Format and Content of a Licensee Physical Protection Plan for Special Nuclear Material of Moderate or Low Strategic Significance” (NRC, 1983). The staff proposes to revise these regulatory guides to describe acceptable methods for complying with the requirements associated with this rulemaking. The revised draft guidance documents are expected to be issued in parallel with the proposed rule. Other guidance documents that require conforming changes would be updated as part of the NRC's process for periodic revision of existing guidance documents.

Licensees possessing Category I or Category III quantities of SNM are inspected consistent with Inspection Manual Chapter 2600, “Fuel Cycle Facility Operational Safety and Safeguards Inspection Program” (NRC, 2010), and other Inspection Manuals in the 2600 series. These inspection manuals provide guidance for assessing facility performance using the Licensee Performance Review process and in preparing for the annual Agency Action Review Meeting. The staff proposes to revise the applicable inspection manuals to address the requirements associated with this SNM rulemaking.

5. Alternatives to Rulemaking

This section discusses the alternatives to rulemaking that the staff considered. This section explains why the NRC or the licensees cannot take actions to resolve the issues effectively within the existing regulatory framework. The alternatives are described and the reasons why they were not pursued are discussed.

In summary, none of the alternatives to rulemaking resolve or address the issues with the existing regulatory framework discussed in Section 3, “Regulatory Problem.”

5.1 No Action

Under this alternative, the NRC would rely on existing regulations, orders, and guidance. Under this alternative, no resources would be necessary for the performance of rulemaking activities. This alternative would require the NRC to issue new security orders to any new facilities possessing Category I or Category III quantities of SNM. This alternative has the greatest regulatory uncertainty for new licensees because they would need to design their physical protection systems based on the regulations and issued security orders, which may be modified to account for site-specific conditions or new threat information. This alternative also would not meet the intent of Commission direction discussed in Section 1, “Background.”

5.2 Revise Existing Regulatory Guidance Documents

Under this alternative, the NRC would issue guidance rather than carry out rulemaking. The NRC’s regulatory guides describe acceptable methods for meeting specific parts of the NRC’s regulations, techniques used by the NRC in evaluating specific issues or postulated accidents, and data needed by the NRC in its review of applications for permits or licenses. As discussed in Section 4.3, “Changes to Regulatory Guidance,” the NRC issued guidance for the physical protection of Category I material (Regulatory Guide 5.52), and Category II and III materials (Regulatory Guide 5.59) in the 1970s and early 1980s. Guidance documents do not impose requirements. Therefore, because the requirements in the post-9/11 security orders are not in the regulations, revising and/or issuing new guidance documents would not be a suitable regulatory approach.

6. Backfit Rule Applicability

As discussed in Section 1, “Background,” the proposed rulemaking includes updating physical protection requirements for SNM at fuel cycle facilities to make security requirements imposed by post-9/11 security orders generically applicable.

Entities that are the subject of backfitting provisions

10 CFR Part 70 and Part 76 facilities³

Fuel cycle facilities licensed under 10 CFR Part 70 and gaseous diffusion plants who have obtained certificates of compliance under 10 CFR Part 76 are the subject of backfitting provisions in 10 CFR 70.76 and 10 CFR 76.76, respectively.

³ The rulemaking would not affect 10 CFR Part 70 licensees who are also nuclear power plant licensees under 10 CFR Part 50 or Part 52 at the same site where licensed materials are used. Accordingly, the special considerations that apply to such rulemakings are not applicable to this rulemaking.

Entities that are not the subject of backfitting provisions

10 CFR Part 50 facilities

Non-power production and utilization facilities licensed under 10 CFR Part 50 are not covered by 10 CFR 50.109, "Backfitting." The rulemaking record for 10 CFR 50.109 indicates that the Commission intended to apply this provision to only nuclear power reactors, and NRC practice has been consistent with this rulemaking record. Thus, backfitting considerations need not be addressed by the staff in developing the proposed rule as applied to non-power production and utilization facilities licensed under 10 CFR Part 50. However, the staff will prepare a regulatory analysis that will include consideration of costs and benefits with respect to non-power production and utilization facilities licensed under 10 CFR Part 50.

Future applicants

Future applicants are not protected by backfitting provisions in 10 CFR 50.109, 10 CFR 70.76, and 10 CFR 76.76 because backfitting is intended to protect the reasonable expectations of certain entities who have received NRC regulatory approvals (e.g., a license), and was not intended to apply to every NRC action that substantially changes the expectations of future applicants.

Codification of Requirements in Orders

Adoption of new or revised regulations that make generically applicable ("codify") existing requirements in security orders issued to fuel cycle facilities does not constitute backfitting. Backfitting concerns were addressed as part of the NRC's issuance of those security orders, so the introduction of new regulations that codify the existing security order requirements need not be treated as an NRC action falling within the definition of backfitting.

7. Stakeholder Interaction

The NRC summarized previous stakeholder interactions in the 2015 regulatory basis. These interactions included workshops, public meetings, and public comments.

After receipt and analysis of public comment on this regulatory basis, this section will be revised to include summarized stakeholder interest and views on the revised regulatory basis.

8. Cost/Impact Considerations

This section discusses cost and other impacts of the proposed changes presented in Section 4, "Basis for Requested Changes." This section discusses potential impacts on three groups: (1) licensees; (2) the NRC; and (3) State, local, or Tribal governments. Potential environmental impacts are also discussed. The analyses presented in this section are qualitative and based on the NRC staff's assessment. After receipt and analysis of public comment on this regulatory basis, the staff will revise this section to include external stakeholder input on cost and impact of the proposed changes. In addition, the staff will prepare a regulatory analysis to support the proposed rule.

8.1 Applicability

The revision of the fixed site physical protection requirements would be intended for all current fuel cycle facility licensees and other licensees that use and possess SNM licensed under 10 CFR Part 70 or Part 76. The revisions also would impact non-power production and utilization facilities licensed under 10 CFR Part 50 that are subject to 10 CFR 73.67.

8.2 Potential Licensee Impacts

The NRC recognizes that existing facilities have physical protection programs that address the existing regulations and applicable portions of security orders. For existing licensees that have already implemented order requirements, the physical protection program activities currently undertaken are not likely to change as a result of the new regulation; therefore, the impact on licensees would be negligible. The NRC recognizes that some changes, such as minor revisions to security plans and/or procedures to document changes in the regulations, may be required. These actions will be addressed in the regulatory analysis that supports the proposed rule.

8.3 Impact on the NRC

As discussed in Section 4.3, supporting guidance would have to be evaluated and revised. The NRC would take actions to withdraw or relax orders, as appropriate.

8.4 Impact on State, Local, or Tribal Governments and Agreement State Licensees

The proposed changes are unlikely to affect State, local, or tribal government resources. To the extent that the changes do impact any State and local resource needs, the staff estimates that the impact would be minimal. Consistent with 10 CFR 150.14, persons in Agreement States possessing, using, or transporting SNM of low strategic significance in certain quantities must meet the physical protection requirements of 10 CFR 73.67. The staff estimates that there are fewer than 20 Agreement State licensees that are subject to 10 CFR 150.14. Given that the proposed changes to 10 CFR 73.67 would be minor, the staff estimates that the burden on these licensees would be small.

8.5 Environmental Analysis

During the proposed rule phase, the proposed requirements will be analyzed to evaluate the potential environmental impacts associated with implementation of the new requirements. The NRC does not anticipate that this rulemaking will have a significant impact on the environment, as licensees within the revised scope of this rulemaking already are engaged in the activities under the post-9/11 security orders.

9. NRC Strategic Plan

The NRC's responsibility includes the regulation of commercial nuclear power plants; non-power production and utilization facilities; nuclear fuel cycle facilities; medical, academic, and industrial uses of radioactive materials; the decommissioning of these facilities and sites; and the transport, storage, and disposal of radioactive materials and wastes. The NRC's regulations are

designed to protect the public and occupational workers from radiation hazards resulting from regulated activities and ensure the secure use of radioactive materials and SNM. Licensees are responsible for the safety and security of radioactive materials. To assist the NRC and its stakeholders in meeting its responsibilities, the NRC prepares and updates a Strategic Plan (NRC, 2018). This section explains how the recommended action would support the NRC's Strategic Plan goals, as well as their associated implementation strategies.

The NRC's strategic goals are:

- Safety: Ensure the safe use of radioactive materials.
- Security: Ensure the secure use of radioactive materials.

To achieve the security strategic goal, the NRC developed the following security-goal implementation strategies designed to avoid instances in which radioactive materials can be used in a hostile manner:

1. Maintain and further risk-inform the current regulatory framework for security using information gained from operating experience, lessons learned, external and internal assessments, technology advances, and changes in the threat environment.
2. Maintain effective, consistent, and risk-informed oversight of licensee performance with respect to meeting NRC security requirements.
3. Maintain material security through the National Materials Program in partnership with the safety programs administered by the Agreement States.
4. Proactively identify, assess, and address threats, vulnerabilities, and security risks.
5. Support U.S. national security interests and nuclear nonproliferation policy objectives consistent with the NRC's statutory mandate through cooperation with domestic and international partners.
6. Ensure material control and accounting for SNM.
7. Ensure that programs for the handling and control of classified and Controlled Unclassified Information are effectively implemented at the NRC and at licensed facilities.

The actions proposed in this revised regulatory basis primarily support the NRC's Strategic Plan in strategy 1.

Implementation of strategy 1 is supported by updating SNM physical protection requirements for fixed sites to include generically applicable security requirements similar to those imposed by the post-9/11 security orders that were based on updated threat intelligence, security assessments, and sharing of information among domestic and international stakeholders.

10. Resources

This rulemaking is included in the NRC budget process. Budgeted activities include development of the proposed and final rule packages, stakeholder interaction, guidance development, and development of inspection procedures.

11. Timing

This rulemaking has been prioritized as a “high priority” activity. The proposed rule and associated guidance are scheduled to be submitted to the Commission on or before May 29, 2020. The final rule is scheduled to be delivered to the Commission approximately one year after the proposed rule is published in the *Federal Register*. No significant policy or legal issues were identified during the development of this revised regulatory basis that need to be resolved before commencing rulemaking.

12. References

NRC (1983), “Standard Format and Content for a Licensee Physical Security Plan for the Protection of Special Nuclear Material of Moderate or Low Strategic Significance,” Regulatory Guide 5.59, Rev. 1, February 1983, ADAMS Accession No. ML100341301.

NRC (1994), “Standard Format and Content of a License Physical Protection Plan for Strategic Special Nuclear Material at Fixed Sites (Other than Nuclear Power Plants),” Regulatory Guide 5.52, Rev. 3, December 1994, ADAMS Accession No. ML003739235.

NRC (2010), “Fuel Cycle Facility Operational Safety and Safeguards Inspection Program,” Inspection Manual Chapter 2600, January 27, 2010, ADAMS Accession No. ML093420698.

NRC (2012), “Regulation of Chemical Security,” SRM-SECY-11-0108, February 15, 2012, ADAMS Accession No. ML120470207.

NRC (2014), “Regulatory Basis Document: Rulemaking for Enhanced Security at Fuel Cycle Facilities; Special Nuclear Material Transportation; Security Fatigue at Nuclear Facilities,” May 2014, ADAMS Accession No. ML14113A468.

NRC (2015), “Rulemaking for Enhanced Security of Special Nuclear Material,” January 2015, ADAMS Accession No. ML14321A007.

NRC (2018), “Strategic Plan: Fiscal Years 2018–2022,” NUREG-1614, Vol. 7, February 2018, ADAMS Accession No. ML18032A561.