

**POLICY ISSUE**  
**(Notation Vote)**

September 21, 2017

SECY-17-0095

FOR: The Commissioners

FROM: Victor M. McCree  
Executive Director for Operations

SUBJECT: REVIEW AND APPROVAL OF PROPOSED REVISION TO  
REGULATORY GUIDE 5.77, "INSIDER MITIGATION PROGRAM"

PURPOSE:

To obtain Commission approval to issue Revision 1 to Regulatory Guide (RG) 5.77, "Insider Mitigation Program." This paper does not address any new commitments or resource implications.

BACKGROUND:

Title 10 of the *Code of Federal Regulations* (10 CFR), section 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage," paragraph (b)(9) requires that licensees establish, maintain, and implement an insider mitigation program (IMP). As required by 10 CFR 73.55(b)(9)(ii), the IMP must contain elements from the following licensee programs: access authorization, fitness-for-duty (FFD), cyber security, and physical protection. However, 10 CFR 73.55(b)(9) does not specify which elements of the aforementioned programs need to be included in an IMP.

The U.S. Nuclear Regulatory Commission (NRC) issued RG 5.77, Revision 0, in March 2009. RG 5.77 describes an approach that the NRC considers acceptable for use by licensees in implementing an IMP. RG 5.77 provides guidance on implementing 10 CFR 73.55(b)(9) by indicating which elements of licensee programs should be included in the IMP. Since RG 5.77 was issued in 2009, the staff identified lessons learned from inspections, operating experience, and license interactions and determined that clarifications to the RG were necessary. Although

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Enclosure 1 transmitted herein contains OOU/SRI information. When separated from Enclosure 1, this transmittal memo is decontrolled.

the staff developed RG 5.77, rev. 1 to capture these enhancements, the staff does not plan to withdraw RG 5.77 Revision 0; Revision 0 and Revision 1 would both be acceptable approaches for implementing 10 CFR 73.55(b)(9).

### DISCUSSION:

The staff developed draft RG 5.77, rev. 1 in order to clarify for operating and decommissioning nuclear power reactor licensees<sup>1</sup>:

- the specific elements of the FFD program in 10 CFR Part 26, “Fitness for Duty Programs,” that licensees should implement as part of their IMP; and
- elements of a 10 CFR 73.54 cyber security program that licensees should implement as part of their IMP program.

These objectives are described in more detail in this section. Enclosure 2 provides the staff’s regulatory basis and backfitting assessment for these two areas of revision.

### FFD Program

The NRC’s FFD rule was originally issued on June 7, 1989 (54 FR 24468). The rule was amended on March 31, 2008 (73 FR 16966), to, in part, improve consistency between FFD requirements and the access authorization requirements that establish the trustworthiness and reliability of personnel at commercial nuclear plants and other affected entities. As required by 10 CFR 73.55(b)(9)(ii)(B), licensees must implement an IMP that incorporates elements of the FFD program set forth in 10 CFR Part 26. Revision 0 to RG 5.77 provided limited guidance on the elements of the Part 26 FFD program that should be incorporated into their IMP. The draft RG 5.77 rev. 1 clarifies which elements of a 10 CFR Part 26 FFD program licensees should implement as part of their IMP program to help ensure that individuals who maintain unescorted access authorization are trustworthy and reliable.

The need for this clarification becomes particularly acute when a 10 CFR Part 50 power reactor licensee enters decommissioning because 10 CFR Part 26 only applies to a Part 50 licensee when the licensee is authorized to operate. Once a 10 CFR Part 50 power reactor licensee has filed the certifications required by 10 CFR 50.82, and those certifications are docketed by the NRC, the licensee is no longer authorized to operate and therefore does not have to maintain an FFD program. The draft RG 5.77, rev. 1 provides clarity for operating and decommissioning nuclear power reactor licensees in determining the FFD elements that should be incorporated into an effective IMP. These elements are described in Section 3.1 of the draft revision.

### Cyber Security Provisions

The NRC’s cyber-security rule was issued on March 27, 2009, as part of the larger Power Reactor Security Requirements rule (74 FR 13926). As required by 10 CFR 73.55(b)(9)(ii)(C), licensees must implement an IMP that incorporates elements of the licensee’s cyber-security program implemented in accordance with the requirements in 10 CFR 73.54. Revision 0 to RG 5.77 provided limited guidance on the elements of their cyber security program that should be incorporated into their IMP program. RG 5.77 rev. 1 clarifies which elements of a 10 CFR

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<sup>1</sup> The staff did not identify the need to clarify the guidance pertaining to access authorization and physical security programs.

73.54 cyber security program licensees should implement as part of their IMP program by incorporating the results of Security Frequently Asked Question (SFAQ) 10-05. SFAQ 10-05 specifies which Information Technology functions and positions should be included in the critical group<sup>2</sup> to ensure consistent and effective implementation of 10 CFR 73.56, "Personnel Access Authorization Requirements for Nuclear Power Plants."

The need for this clarification becomes particularly acute when a 10 CFR Part 50 power reactor licensee enters decommissioning because the 10 CFR 73.54 cyber security program only applies when a licensee is authorized to operate. Once a 10 CFR Part 50 power reactor licensee has filed the certifications required by 10 CFR 50.82, and those certifications are docketed by the NRC, the licensee is no longer authorized to operate and therefore does not have to maintain a cyber security program. The proposed revisions to RG 5.77 provide clarity for operating and decommissioning nuclear power reactor licensees in determining the cyber security elements that should be incorporated into an effective IMP. These elements are described in Section 3.3 of the draft revision.

#### Engagement with External Stakeholders on Revision to RG 5.77

This subsection describes the staff's interaction with external stakeholders in revising RG 5.77, as well as several opportunities for those stakeholders to provide comment. Generally, comments were either editorial in nature or provided recommendations to clarify the guidance in order to avoid unintended consequences. The clarifications noted above to FFD and cyber security programs were informed by these interactions.

On January 4, 2016, the staff released Draft Regulatory Guide (DG-5044) (draft RG-5.77, rev.1) for a 60 day comment period to external stakeholders with a need-to-know. Since the document was Official Use Only – Security-Related Information, the NRC did not make DG-5044 publicly available or publish a *Federal Register* notice to open a public comment period. In order to facilitate stakeholder comment, the NRC staff provided the document to the Nuclear Energy Institute (NEI) for distribution to authorized industry stakeholders. In addition, Dr. Edwin Lyman, of the Union of Concerned Scientists (UCS), also visited NRC headquarters to review a copy of the draft RG and to provide comments. Dr. Lyman has a clearance and provides perspectives on the security issues set forth in this DG as an informed member of the public. Since January 2016 the NRC staff has held several closed meetings with stakeholders, both to facilitate understanding of the revision and to obtain feedback.

On January 27, 2016, the staff held a closed meeting with cleared stakeholders to discuss draft RG 5.77, rev. 1. The purpose of this meeting was to facilitate stakeholder understanding of the changes in order to facilitate feedback. During the meeting, staff discussed the rationale behind the proposed revisions and answered clarifying questions from stakeholders, but did not accept formal comments.

On February 25, 2016, NEI submitted a letter (Agencywide Documents and Management System (ADAMS) Accession No. ML16056A531) to the Chairman of the NRC requesting a closed meeting with the Commission on security issues. Commenting on the revision to RG 5.77, the NEI letter indicated at a high level, that industry was concerned that there were new expectations for insider mitigation for the cyber threat. On March 2, 2016, NEI submitted formal

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<sup>2</sup> The NRC uses the term "critical group" to include, at a minimum, those individuals identified in 10 CFR 73.56(b) and those who provide services or perform one or more job functions that are critical to the safe and secure operation of the licensee's facility. The term critical group is fully defined in the glossary to RG 5.77.

comments on draft RG 5.77, rev. 1.

In response to the February NEI letter, the Commission held a closed meeting on June 23, 2016, with external stakeholders to discuss security issues at nuclear power plants, to RG 5.77, rev. 1. On June 27, 2016, the Commission issued a Staff Requirements Memorandum (SRM), "Discussion of Security Issues," (ADAMS Accession No. ML16179A382) which, directed the staff to complete interactions with stakeholders regarding any guidance updates and submit them to the Committee to Review Generic Requirements (CRGR) for review. The Commission also directed the staff to provide RG-5.77, rev. 1 to the Commission for review and approval following CRGR's review. Lastly, the Commission directed the staff to include its regulatory basis for the proposed revisions as well as a documented evaluation or backfitting analysis, as applicable, in accordance with 10 CFR 50.109, "Backfitting."

The NRC staff held a closed meeting with cleared stakeholders on July 19, 2016, to discuss the comments submitted by UCS and NEI in January and March, respectively. Staff held a final meeting with cleared stakeholders on August 25, 2016, to discuss those items where questions remained. At the conclusion of the meeting, all parties were in general agreement on the disposition of stakeholder comments.

On September 9, 2016, the staff made the final draft RG 5.77, rev. 1 available to cleared stakeholders reflecting all revisions made in response to comments received. On October 7, 2016, NEI, on behalf of industry, submitted a few supplemental comments for staff consideration. The NRC staff resolved these comments to the extent practical and made changes to the RG, as appropriate.

On October 21, 2016, during a visit to NRC headquarters, Dr. Lyman reviewed the final draft to RG 5.77, rev. 1 and stated that UCS had no issues with the final version. In a letter dated December 5, 2016 (ADAMS Accession No. ML17066A444), NEI indicated that it had no additional comments or questions on the draft final version of the draft RG 5.77, rev. 1.

### CRGR Review

As directed in SRM-M160623B on July 3, 2017, the NRC staff submitted the draft final RG 5.77, rev. 1 to the CRGR for review. The CRGR reviewed the draft final RG during a meeting with the staff on July 11, 2017. Based on its review, the CRGR concluded that the proposed regulatory guide would not impose a new staff position, any new requirements, or a backfit. Moreover, the CRGR endorsed the revised proposed regulatory guide, as indicated in its letter dated August 18, 2017 (ADAMS Accession No. ML17228A119).

### RECOMMENDATION:

The NRC staff recommends that the Commission approve RG 5.77, rev. 1 for issuance. Issuance of the revised RG would provide clear guidance to licensees with respect to the 10 CFR Part 26 FFD elements that support the IMP, both when a nuclear power reactor is operating and when it is in a decommissioning status. Additionally, the revision would clarify the cyber security elements that support a licensee's IMP by capturing the conclusions in SFAQ 10-05. As stated in the "Background" section, Revision 0 would remain acceptable for use even after issuance of Revision 1 (if approved by the Commission).

The Commissioners

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COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection.

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Enclosures:  
As stated

SECY - PROPOSED REVISION TO REGULATORY GUIDE 5.77, "INSIDER MITIGATION PROGRAM" DATED: September 21, 2017

**ADAMS Accession No.: ML17066A111**

**Package No.: ML17066A109**

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