



POLICY ISSUE (Notation Vote)

April 10, 2023

SECY-23-0033

FOR: The Commissioners

FROM: Daniel H. Dorman
Executive Director for Operations

SUBJECT: INTERIM ENFORCEMENT POLICY FOR DISPOSITIONING
TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* PART 37
VIOLATIONS WITH RESPECT TO LARGE COMPONENTS OR
ROBUST STRUCTURES CONTAINING CATEGORY 1 OR
CATEGORY 2 QUANTITIES OF RADIOACTIVE MATERIAL AT POWER
REACTOR FACILITIES LICENSED UNDER TITLE 10 OF THE *CODE
OF FEDERAL REGULATIONS* PART 50 OR TITLE 10 OF THE *CODE
OF FEDERAL REGULATIONS* PART 52

PURPOSE:

The purpose of this paper is to request Commission approval for an interim enforcement policy (IEP) that will allow the staff to continue to exercise enforcement discretion for dispositioning violations associated with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material," involving large components containing Category 1 or Category 2 quantities of radioactive material, or Category 1 and Category 2 quantities of radioactive material stored in robust structures at power reactor facilities licensed under 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," or 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants," until the issue is dispositioned through rulemaking or other regulatory action. This paper does not address any new commitments or resource implications.

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BACKGROUND:

On June 15, 2010, the U.S. Nuclear Regulatory Commission (NRC) issued the proposed rule “Physical Protection of Byproduct Material,” for an initial public comment period (75 FR 33901). The agency subsequently published an extension notice on October 8, 2010, which extended the public comment period until January 18, 2011 (75 FR 62330).

Several commenters expressed concern about extending applicability for the proposed rule beyond byproduct material licensees to power reactor licensees. Specifically, the commenters stated that extending the requirements to large components or radioactive storage facilities located at power reactor plant sites appeared unwarranted. Accordingly, they recommended limiting the applicability of the rule to exclude large components and radioactive storage facilities and developing an appropriate threshold to exempt single items or items of aggregated quantities of large volume or weight, such that exemption requests would not be necessary, and the security provisions of 10 CFR Part 37 would not apply.

The NRC agreed, in part, with the commenters and determined that it is appropriate to include a partial exemption in the regulation instead of treating exemption requests on a case-by-case basis. The staff added paragraph (c) to Title 10 of the *Code of Federal Regulations* (10 CFR) 37.11, “Specific exemptions,” to address radioactive waste materials. The provision does require the application of some security measures to the waste exempted under 10 CFR 37.11, but the majority of the 10 CFR Part 37 requirements would not apply. Security measures included the use of continuous physical barriers, alarmed locked gates or doors, and assessment of and response to unauthorized entry. However, as described further below, the exemption does not cover large components or robust structures containing Category 1 or Category 2 quantities of radioactive material.

On March 19, 2013, the NRC issued a final rule establishing 10 CFR Part 37. The rule establishes physical protection requirements for licensees in possession of aggregated quantities of Category 1 or Category 2 radioactive material listed in Appendix A, “Category 1 and Category 2 Radioactive Materials,” to 10 CFR Part 37 (78 FR 16921). These requirements are similar to those previously imposed by orders from the NRC and Agreement States after September 11, 2001. The NRC licensees were required to be in compliance with the rule by March 19, 2014.

On March 13, 2014, before the compliance date for 10 CFR Part 37, the NRC issued Enforcement Guidance Memorandum (EGM)-14-001, “Interim Guidance for Dispositioning 10 CFR Part 37 Violations with Respect to Large Components or Robust Structures Containing Category 1 or Category 2 Quantities of Material at Power Reactor Facilities Licensed Under 10 CFR Parts 50 and 52 (RIN 3150-A112),” dated March 13, 2014 (Agencywide Document Access and Management System Accession No. ML14056A151). This EGM allows the staff to exercise enforcement discretion with respect to large components (i.e., steam generators, steam dryers, turbine rotors, reactor vessels, reactor vessel heads, reactor coolant pumps, and shielding blocks) containing Category 1 or Category 2 quantities of radioactive material, and Category 1 and Category 2 quantities of radioactive material stored in robust structures such as a mausoleum (i.e., closed concrete bunker or modular vault for which the radioactive materials within can only be accessed using heavy equipment to remove structural components or large access blocks that weigh 2,000 kilograms or more) at power reactor facilities licensed under 10 CFR Part 50 or 10 CFR Part 52. The NRC staff developed and issued EGM-14-001 with

input from staff subject matter experts and licensees, indicating that even with the addition of 10 CFR 37.11(c), these licensees could not reasonably meet the reduced security requirements of 10 CFR 37.11(c) due to the locations of these storage facilities and the infrastructure needed.

On June 12, 2014, the Nuclear Energy Institute (NEI) submitted Petition for Rulemaking (PRM)-37-1, identifying three issues and requesting that the NRC amend 10 CFR Part 37 to clarify and expand current exemptions in 10 CFR 37.11 for when the physical protection measures for Category 1 and Category 2 quantities of radioactive material do not apply to a power reactor licensee. NEI stated that both licensees and the NRC have encountered significant problems with 10 CFR 37.11 that can only practically be remedied with a rulemaking. Specifically, NEI requested that the NRC revise the exemptions in 10 CFR 37.11(b) and (c) and add a new 10 CFR 37.11(d) to address the issues identified in EGM-14-001. NEI indicated that the exemption in 10 CFR 37.11(c) only addresses waste material, and therefore large components and non-waste material stored in robust structures that present a similar or lower risk for theft or diversion are not exempt from the 10 CFR Part 37 requirements. NEI noted that, as part of the 10 CFR Part 37 implementation process, the NRC recognized the low risk associated with large components and the storage of material in robust structures and issued EGM-14-001 to provide the appropriate oversight guidance. NEI stated that a rulemaking to codify EGM-14-001's rationale would recognize the practicalities mitigating the actual risk of theft or diversion and would avoid the long-term use of enforcement discretion and case-by-case exemption in this area.

On June 12, 2015, the NRC issued a *Federal Register* notice stating that it had reviewed the petition and related public comments and agreed to consider the issue raised in the rulemaking process (80 FR 33450). In the interim, EGM-14-001 would address large components and storage of radioactive material in robust structures.

On August 19, 2021, the Commission issued "Staff Requirements—COMSECY-21-0010—Revision of the Reactor Oversight Process Public Radiation Safety Significance Determination Process" (ML21231A250), in which it approved the recommendation to update the significance determination process for the Public Radiation Safety cornerstone of the Reactor Oversight Process (ROP) to incorporate the disposition of inspection findings related to 10 CFR Part 37. On September 24, 2021, the NRC issued the updated Inspection Manual Chapter 0609 Appendix D, "Public Radiation Safety Significance Determination Process," to reflect the Commission-approved changes.

In January 2022, regional management requested that the Office of Enforcement revise EGM-14-001 to incorporate a few minor editorial changes and to remove the requirement to bring these enforcement actions to an enforcement panel before allowing the staff to exercise enforcement discretion under the EGM. Additionally, the staff considered the potential risks presented by extended reliance on an EGM absent a clearly defined plan to restore compliance through the regulatory process.

EGM-14-001 has been executed approximately 20 times since its inception and has been in place longer than originally envisioned, primarily because of the priority of this rulemaking compared to other work and rulemaking activities, including the Radioactive Source Security and Accountability accelerated rulemaking activity. The staff is currently developing a rulemaking plan that would request Commission approval to initiate a rulemaking that would amend 10 CFR Part 37 to address requirements for unescorted access, notification of legal actions, and coordination with law enforcement at temporary sites; specify time periods for

advance license verifications; and require the development of implementing procedures associated with the shipment of radioactive materials. This rulemaking would also address the issues raised by NEI in PRM-37-1. In accordance with the Common Prioritization of Rulemaking, this rulemaking is currently a medium priority with a score of 16 points because it is a moderate contributor (7 points out of 20 possible) toward the agency's safety and security goals (Safety Strategies 1, 4, and 5; Security Strategies 2 and 3), a moderate contributor (3 points out of 5 possible) to multiple Principles of Good Regulation, a minor contributor (2 points out of 10 possible) to governmental policy, and a minor contributor (4 points out of 10 possible) to stakeholder confidence.

DISCUSSION:

EGMs are intended to provide temporary guidance and are typically put in place for relatively short periods of time. Pending the active pursuit of the Part 37 rulemaking, it would be appropriate and advantageous to issue an IEP to allow continued enforcement discretion until the underlying technical issue is dispositioned through rulemaking or other regulatory action. IEPs provide an avenue to establish policy, allowing them to be in place for longer periods of time than EGMs and providing for increased regulatory clarity because they are approved by the Commission as a policy matter. IEPs also offer enhanced openness because they are published in the Federal Register to provide broad awareness among stakeholders and incorporated in the Enforcement Policy. This paper addresses the need for an IEP that would allow the staff to continue to exercise enforcement discretion and not issue a notice of violation pending rulemaking or other appropriate regulatory action. On January 18, 2023, the staff provided an overview of the proposed IEP to the participants of the ROP Bi-monthly public meeting.

After a review of how 10 CFR Part 37 requirements apply to large components and Category 1 or Category 2 quantities of radioactive material stored in robust structures, and after interactions with stakeholders in public meetings, the staff has determined that enforcement discretion, under certain conditions, is appropriate for some violations of 10 CFR Part 37 at power reactor facilities while rulemaking or appropriate regulatory action is considered.

For this IEP, a large component is defined as an item weighing 2,000 kilograms or more but not containing either discrete sources or ion-exchange resins. In this context, large components typically include steam generators, steam dryers, turbine rotors, reactor vessels, reactor vessel heads, reactor coolant pumps, and shielding blocks. Due to their size and weight, these large components are not easily moved without cranes, rigging, and heavy equipment. In addition, these large components are not easily concealed during loading or when they are in motion, and the amount of time required to steal or divert these large components is such that it is reasonable to expect that the licensee would detect these activities.

For this IEP, a robust structure is defined as a closed concrete bunker or modular vault, for which the radioactive materials contained within the structure can only be accessed using heavy equipment to remove structural components or large access blocks that weigh 2,000 kilograms or more. Access to these robust structures requires significant execution time. Typically, routine work activities, observation by licensees' authorized individuals located within or close to these robust structures, or observation by licensees' authorized individuals conducted in accordance with 10 CFR 73.55(i)(5)(ii), "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage – Detection and assessment systems – Surveillance, observation, and monitoring," requirements, make it likely that licensees would detect actual or attempted theft and diversion considering the time needed to accomplish these activities.

The definitions of “large component” and “robust structure” used in this IEP are identical to those successfully used for several years under EGM-14-001 and to date are sufficient to address past or future violations until the underlying technical issue is dispositioned through a rulemaking or other regulatory action.

Under this IEP, the staff will typically exercise enforcement discretion and not issue a notice of violation pursuant to 10 CFR 37.11(c)(1) and (2), “Specific exemptions,” or 10 CFR part 37 Subpart B, “Background Investigations and Access Authorization Program,” Subpart C, “Physical Protection Requirements During Use,” and Subpart D, “Physical Protection in Transit,” except for violations of 10 CFR 37.43(c), “General security program requirements – Training”; 10 CFR 37.45, “LLEA coordination”; 10 CFR 37.49(b), “Monitoring, detection, and assessment”; 10 CFR 37.49(d), “Response”; 10 CFR 37.57, “Reporting of events”; and 10 CFR 37.81, “Reporting of events,” involving robust structures containing Category 1 or Category 2 quantities of radioactive material, or large components containing Category 1 or 2 quantities of radioactive material.

Discretion will be typically exercised if the licensee meets these conditions: (1) has identified in writing those large components and robust structures that contain Category 1 or Category 2 quantities of radioactive material for which it is not in compliance with 10 CFR Part 37, (2) has an approved 10 CFR Part 73, “Physical Protection of Plants and Materials,” security plan or a written 10 CFR Part 37 security plan that provides security measures adequate to detect, assess, and respond to actual or attempted theft or diversion, as well as a written analysis that considers the time needed to accomplish these activities given the proximity and mobility of the equipment available for those large components and robust structures identified above, and (3) has a written analysis documenting that the measures above do not decrease the effectiveness of the 10 CFR Part 73 security plan.

An enforcement panel is not required to disposition a violation using this discretion; however, each time discretion is granted, an enforcement action number will be assigned to document the use of discretion under this IEP. This discretion is not limited to the initial inspection identifying the noncompliance and can be applied to subsequent inspections, provided that all the criteria continue to be met.

Licensees are allowed to submit a request for a specific exemption, as described in 10 CFR 37.11(a), for material that may not be included in the definitions above.

The NRC will keep this interim policy in place until the underlying technical issue is dispositioned through rulemaking or other regulatory action.

RECOMMENDATIONS:

Approve the enclosed draft *Federal Register* notice and the Proposed Interim Enforcement Policy - Section 9.3, “Enforcement Discretion for Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material (10 CFR Part 37)”.

COORDINATION:

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

Daniel H. Dorman
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for Operations

Enclosures:

1. FRN - Interim Enforcement Policy for Dispositioning Violations with Respect to Large Components or Robust Structures Containing Cat1 or Cat 2 Quantities of Radioactive Material
2. Proposed Interim Enforcement Policy - Section 9.3, "Enforcement Discretion for Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material (10 CFR Part 37)"

SUBJECT: INTERIM ENFORCEMENT POLICY FOR DISPOSITIONING TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* PART 37 VIOLATIONS WITH RESPECT TO LARGE COMPONENTS OR ROBUST STRUCTURES CONTAINING CATEGORY 1 OR CATEGORY 2 QUANTITIES OF RADIOACTIVE MATERIAL AT POWER REACTOR FACILITIES LICENSED UNDER TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* PART 50 OR TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* PART 52. DATED: April 10, 2023.

EDO Ticket No.: OEDO-23-00074
ADAMS Package: ML22306A099
Commission Paper: ML22306A106
Enclosure 1: ML22306A117
Enclosure 2: ML22306A114

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