

RTR Security Updates

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Agenda

- Modernizing Security Requirements
 - Proposed Changes for CAT II/III Facilities
- Reg Guide 5.59 Proposed Updates
 - RTR Specific Considerations
- Upcoming Security Evolutions
 - Fuel Shipments
 - Adding Materials to License

Modernizing Security Requirements

Proposed Rule

- Rulemaking Background
 - [Executive Order \(E.O.\) 14300](#), "Ordering the Reform of the Nuclear Regulatory Commission."
 - The proposed rulemaking would address, in part, direction to the NRC to "(r)evise the Reactor Oversight Process and reactor security rules and requirements to reduce unnecessary burdens and be responsive to credible risks."
- Estimated date to publish final rule: January 2027 ([NRC Planned Rulemaking Activities - Rule](#))

Proposed Changes for CAT II & III Material Security

- Shifts to performance-based security requirements for Category II Special Nuclear Material (SNM)
- Increases licensee flexibility: tailored physical protection measures
- Establishes standardized requirements to address regulatory gaps
- Strengthens performance objectives



Proposed Changes for CAT II & III Material Security

- Allows alternative security measures that meet the applicable performance objectives
- Provides flexibility for existing licensees
- Allows NRC to adjust requirements based on facility-specific risk and site conditions

Reg Guide 5.59 Rev 2 (DG-5088)

- Publicly available in ADAMS under ML25233A199
- May affect licensees with CAT II quantities of material
- Proposed directions: material attractiveness, site-specific conditions, defense-in-depth, and integrated physical protection.

What is Most Relevant to RTRs?

- CAT II inventory:
 - Where material is on site?
 - How long will it be maintained?
 - If material is used or stored?
 - How material moves through the facility?
- Consider the material itself including, but not limited to:
 - Physical/chemical form
 - Quantity
 - Enrichment
 - Accessibility
 - Changes associated with irradiation that affect attractiveness

What is Most Relevant to RTRs?

- Use existing capabilities to contribute to protection:
 - Existing CAA barriers
 - Access controls and alarms
 - Communications
 - Procedures
 - Response capabilities
- Scale to the facility: Research facilities may use less complex isolation and access-control arrangements than large fuel-processing facilities while achieving comparable protection.

RG 5.59 Rev 2 Key Takeaways

- Proposed revision is intended to support physical protection that is commensurate with;
 - Material
 - Facility
 - Activities
 - Site-specific conditions

Upcoming Security Evolutions

- Fuel Shipments, engage with NRC staff early
 - Project Manager
 - Quality Assurance
 - Security Specialist
 - Facility Inspector
- Adding materials to license
 - Modernizing Security Requirements rule
 - RG 5.59 Rev 2
 - DANU ISG-2026-01



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Questions?