

Regulatory Guidance

The rulemaking proposes changes to requirements in numerous technical areas. In some of these areas, the U.S. Nuclear Regulatory Commission (NRC) staff developed new or updated regulatory guidance to help licensees implement the proposed requirements. The rest of the proposed changes to requirements are straightforward, and implementation guidance is not necessary. In other cases, ongoing guidance development or update projects are underway on topics similar to those addressed in the rulemaking. This enclosure discusses the guidance that would be issued for public comment in parallel with the proposed rule, areas for which the NRC staff does not find guidance is necessary, and the coordination between this rulemaking and other guidance projects underway.

Implementing Guidance Developed in Parallel with the Rulemaking

In accordance with the cumulative effects of regulations program, the NRC staff evaluated the need for regulatory guidance to implement the proposed requirements in the decommissioning proposed rule. The NRC staff developed two draft regulatory guides (DGs) that would help licensees implement new proposed rule requirements and two DGs that would clarify guidance about existing requirements. The NRC would issue the following four guides for public comment in parallel with the proposed rule:

- (1) DG-1346, “Emergency Planning for Decommissioning Nuclear Power Reactors” (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17311B018), would be a new regulatory guide (RG).
- (2) DG-1347, “Decommissioning of Nuclear Power Reactors” (ADAMS Accession No. ML17347A794), would be Revision 2 to existing RG 1.184. DG-1347 would clarify guidance about existing requirements.
- (3) DG-1348, “Assuring the Availability of Funds for Decommissioning Nuclear Reactors” (ADAMS Accession No. ML17348B485), would be Revision 2 to existing RG 1.159.
- (4) DG-1349, “Standard Format and Content for Post-Shutdown Decommissioning Activities Report” (ADAMS Accession No. ML17353A727), would be Revision 2 to existing RG 1.185. DG-1349 would clarify guidance about existing requirements. Further, DG-1349 would provide best practices regarding the creation of community advisory boards for decommissioning facilities.

Subjects for which New or Updated Implementing Guidance Is Not Necessary

The NRC staff found that, in several technical areas, the proposed changes to the regulations are straightforward enough that updating or developing new implementation guidance is not necessary. The technical areas for this category include physical security, cyber security, and certified fuel handler training. In those areas, the statement of considerations would provide sufficient background and discussion to make implementing the proposed regulations clear.

Physical Security and Cyber Security

The implementation of NRC security requirements is captured in the licensees’ Commission-approved physical security plan, training and qualification plan, safeguards contingency plan, and cyber security plan—collectively referred to as “security plans.” The

security plans identify, describe, and account for site-specific conditions that affect the licensee's capability to satisfy the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 73.55 "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage." The objective of the requirements is to ensure licensees establish and maintain a physical protection program, to include a security organization, which has as its objective to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to public health and safety.

The NRC has put in place regulatory guidance, including the following RGs, to help licensees develop security plans:

- RG 5.54, "Standard Format and Content of Safeguards Contingency Plans for Nuclear Power Plants (SGI)"
- RG 5.66, "Access Authorization Program for Nuclear Power Plants"
- RG 5.68, "Protection against Malevolent Use of Vehicles at Nuclear Power Plants"
- RG 5.71, "Cyber Security Programs for Nuclear Facilities"
- RG 5.75, "Training and Qualification of Security Personnel at Nuclear Power Reactor Facilities"
- RG 5.76, "Physical Protection Programs at Nuclear Power Reactors (SGI)"
- RG 5.77, "Insider Mitigation Program"
- RG 5.79, "Protection of Safeguards Information"

The physical security changes in the proposed rule would provide relief from existing requirements or provide licensees alternatives in meeting requirements. Specifically, if this rule is approved, licensees would no longer need to protect the reactor from significant core damage once all fuel is removed from the reactor vessel. Additionally, the proposed rule would amend requirements for maintaining continual communications with the control room to allow continual communications not only with the control room but also as an alternative with senior site personnel, once the control room is no longer needed. As proposed, certified fuel handlers as well as licensed senior operators could suspend security requirements when health and safety concerns arise under the provisions of 10 CFR 73.55(p).

The changes proposed in this rule would also improve the process under 10 CFR 50.54(p) by which licensees make changes to security plans, with new rule language clarifying what constitutes a decrease in effectiveness and what the submitted report should include. Finally, proposed changes would provide licensees the choice to follow 10 CFR 73.51, "Requirements for the physical protection of stored spent nuclear fuel and high-level radioactive waste," instead of 10 CFR 73.55 once all spent nuclear fuel has been moved from the spent fuel pool to dry cask storage.

The cyber security changes in the proposed rule would extend the applicability of 10 CFR 73.54, "Protection of digital computer and communication systems and networks," to require licensees

to maintain their cyber security programs until the fuel in the spent fuel pool has decayed such that it would not reach ignition temperature within 10 hours under adiabatic heatup conditions. No changes to the licensee cyber security program would be required.

The proposed rule would not add new mandatory requirements, so no new guidance is needed beyond that currently available. The statement of considerations for the proposed and final rules will describe when licensees may choose to implement the burden reductions. The NRC staff finds that additional guidance beyond that contained in the statement of considerations is not necessary to implement the new voluntary proposed regulations for these technical areas.

Certified Fuel Handler Training

Guidance is not required for implementing the aspects of the proposed rule concerning fuel handler training. The proposed changes to the requirements would be consistent with current regulatory practices, and sufficient precedent for those practices exists that licensees can use as examples for drafting their certified fuel handler training programs.

Other Guidance Development

The NRC staff is developing several other guidance documents on topics similar to those addressed through the decommissioning rulemaking. The NRC staff found that the guidance below is not necessary to implement the proposed requirements in the decommissioning proposed rule. For completeness, this enclosure describes the relationship of those other projects to the decommissioning rulemaking.

Decommissioning Generic Environmental Impact Statement

The NRC describes options for decommissioning in NUREG-0586, "Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities: Supplement 1, Regarding the Decommissioning of Nuclear Power Reactors," Volumes 1 and 2, issued November 2002 (ADAMS Accession No. ML 023470327), also called the Decommissioning Generic Environmental Impact Statement (GEIS). As stated in the final regulatory basis for the rulemaking (ADAMS Accession No. ML 17215A010), any update to the Decommissioning GEIS would be on a different schedule than that of the implementing guidance being developed in parallel with the rulemaking. The Decommissioning GEIS is reviewed and updated periodically on a separate schedule, and any updates would involve technical areas beyond those covered in the subject decommissioning rulemaking. Any lessons learned from the decommissioning rulemaking will be coordinated with the next update to the Decommissioning GEIS.

Regulatory Guide 5.77

The current version of RG 5.77, "Insider Mitigation Program," issued March 2009 (ADAMS Accession No. ML15219A609), provides guidance on the elements of access authorization, physical security, and fitness-for-duty programs necessary for an insider mitigation program. The decommissioning rulemaking also involves the elements of fitness-for-duty programs necessary for an insider mitigation program. Separate from the decommissioning rulemaking activity, on September 21, 2017, the NRC staff provided the Commission with SECY-17-0095, "Review and Approval of Proposed Revision to Regulatory Guide 5.77, 'Insider Mitigation Program'" (ADAMS Accession No. ML17066A111), which requested Commission approval of RG 5.77, Revision 1 (not publicly available).

RG 5.77, Revision 1, focuses on the elements of a fitness-for-duty program and cyber security program to support an insider mitigation program. The NRC staff will ensure that RG 5.77 is revised if necessary to be consistent with the final rule.

Aging Management of Spent Fuel Pool Structures, Systems, and Components

In the regulatory basis, the NRC staff recommended development of new guidance addressing aging management of structures, systems, and components in spent fuel pools operated at sites with decommissioned reactors. Because the NRC staff did not recommend changes to the regulations, the decommissioning rulemaking no longer addresses this topic. However, the NRC staff will continue to coordinate to ensure technical consistency between the decommissioning rulemaking and existing and new guidance for aging management in spent fuel pools.

On October 5, 2017, the NRC issued a letter (ADAMS Accession No. ML17262A000) endorsing the approval version of Nuclear Energy Institute (NEI) 16-03-A, "Guidance for Monitoring of Fixed Neutron Absorbers in Spent Fuel Pools," Revision 0, issued May 2017 (ADAMS Accession No. ML17263A133). NEI 16-03-A provides guidance to licensees about aging management for spent fuel pool systems, structures, or components for sites with operating reactors. The NRC staff will incorporate lessons learned from the use of NEI 16-03-A to develop guidance for aging management in spent fuel pools at sites with decommissioned reactors. The technical concerns for spent fuel pools at both types of sites are similar, with the notable exception that sites with decommissioned reactors will not have newly discharged fuel being placed into the spent fuel pool.

Foreign Ownership, Control, or Domination

Development of guidance about foreign ownership, control, or domination (FOCD) is already underway with independent Commission direction (SRM-SECY-14-0089, "Fresh Assessment of Foreign Ownership, Control, or Domination of Utilization Facilities," dated May 4, 2015 (ADAMS Accession No. ML15124A940)) and will address more topics than those proposed within the scope of the subject rulemaking. The NRC staff will ensure that the guidance developed for FOCD is consistent with the technical content of the rulemaking.

Indemnity

In the regulatory basis, the NRC staff recommended development of new guidance addressing indemnity for decommissioning reactor licensees. Since the NRC staff did not recommend changes to the regulations, the decommissioning rulemaking no longer addresses this topic. However, NRC staff will continue to coordinate to ensure technical consistency between the decommissioning rulemaking and the new guidance that is being developed separately from this rulemaking activity for indemnity.