

Regulatory Guide Periodic Review

Regulatory Guide Number: 3.61, Revision 0

Title: Standard Format and Content for a Topical Safety Analysis Report for a Spent Fuel Dry Storage Cask

Office/division/branch: NMSS/DSFM
Technical Lead: Bernie White

Recommended Action: Revise

1. What are the known technical or regulatory issues with the current version of the Regulatory Guide (RG)?

This RG was issued in 1989 to provide guidance for a safety analysis report that is included with an application for a license under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste."

Significant changes to staff guidance have been made since the publication of the initial RG, including combining NUREG-1536, "Standard Review Plan for Spent Fuel Dry Storage Systems at a General License Facility — Final Report," and NUREG-1567, "Standard Review Plan for Spent Fuel Dry Storage Facilities" into a single standard review plan, NUREG-2215, "Standard Review Plan for Spent Fuel Dry Storage Systems and Facilities." Thus, the RG information is inconsistent with current staff expectations for applications for cask certificates of compliance (CoCs) and storage facility licenses.

Information which is not reflected in Revision 0 of RG 3.61 includes: 1) the addition to the staff's review guidance of a materials chapter and information regarding storage of non-fuel hardware, 2) the condition of the spent fuel contents, 3) off-site dose evaluations for the radiation protection chapter, 4) off-normal conditions and accident conditions evaluations in the thermal chapter, and 5) off-normal conditions evaluations for the confinement chapter.

2. What is the impact on internal and external stakeholders of not updating the RG for the known issues, in terms of anticipated numbers of licensing and inspection activities over the next several years?

The staff anticipates one new application for a dry cask storage certificate of compliance and 6 amendments to existing certificates of compliance each year for the next few years.

The staff has estimated that the guidance in NUREG-2215, "Standard Review Plan for Spent Fuel Dry Storage Systems and Facilities" will become publicly available by the 4th quarter CY 2019. This guidance explains how the staff reviews applications for cask CoCs and storage facility licenses. Holders of, and applicants for, storage facility licenses and storage cask CoCs, could refer to the new NUREG-2215 for the required information and analyses they need to include in their applications.

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However, the guidance information for CoCs applications in RG 3.61 is inconsistent with NUREG-2215. This could cause confusion and lead to incomplete or inadequate CoCs applications, thus affecting licensing activities. This in turn can mean lengthier reviews and increased resource expenditures for the staff and the applicant.

3. What is an estimate of the level of effort needed to address identified issues in terms of full-time equivalent (FTE) and contract dollars?

Approximately 0.1 FTE will be required to complete the review and update of the RG. No contract funding is needed.

4. Based on the answers to the questions above, what is the recommended staff action for this RG (Revise, Review, Administrative Change, or Withdraw)?

Revise

5. If a RG should be revised, provide a conceptual plan and timeframe to accomplish this.

The staff plans to combine RG 3.61, "Standard Format and Content for a Topical Safety Analysis Report for a Spent Fuel Dry Storage Cask," with RG 3.48, "Standard Format and Content for the Safety Analysis Report for an Independent Spent Fuel Storage Installation or Monitored Retrievable Storage Installation (Dry Storage)," and RG 3.62, "Standard Format and Content for the Safety Analysis Report for Onsite Storage of Spent Fuel Storage Casks," into a revision to RG 3.61, and include updated guidance to be consistent with NUREG-2215.

The staff plans to submit a draft guide to the staff in the Office of Nuclear Regulatory Research for review by the end of CY 2019 and, plans to publish it for public comment in the 2nd quarter CY 2020.

NOTE: This review was conducted in July 2019 and reflects the NRC staff plans as of that date. These plans are tentative and are subject to change.