

Regulatory Guide Periodic Review

Regulatory Guide Number: **3.15**

Title: **Standard Format and Content of License Applications for Storage Only of Unirradiated Power Reactor Fuel and Associated Radioactive Material**

Office/division/branch: **NMSS/DFCSS/CDEB**
Technical Lead: **Mary Adams**

Recommended Staff Action: **Revise**

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

Regulatory Guide 3.15, Standard Format and Content of License Applications for Storage Only of Unirradiated Power Reactor Fuel and Associated Radioactive Material, was written in 1973 and revised in 1983. Since then, regulations and other guidance have been revised, and NRC has gained experience with licensing the storage of fresh fuel at reactors. This revision of Regulatory Guide 3.15 incorporates updates to regulations and guidance applicable to licensing the receipt and storage of unirradiated power reactor fuel and associated radioactive materials.

The revised RG adds citations to specific current regulations in 10 CFR Part 70 Domestic Licensing of Special Nuclear Material; Part 20, Standards for Protection Against Radiation; Part 30, Rules of General Applicability to Domestic Licensing of Byproduct Material; Part 51, Environmental Protection Regulations for Domestic Licensing and Related Regulatory functions; Part 73, Physical Protection of Plants and Materials; and Part 74, Material Control and Accounting of Special Nuclear Material. Additions to the RG include facility description, institution information, site description, reactor and fuel description, organization and administration, radiation protection, nuclear criticality safety, fire safety, emergency planning, environmental protection including NEPA requirements, decommissioning, physical protection and physical security, material control and accounting, and other materials requiring NRC license.

As background, a permit under 10 CFR Part 50, Domestic Licensing of Production and Utilization Facilities, to construct a nuclear power plant does not authorize the permit holder to receive, possess, or store NRC-licensed material, including unirradiated reactor fuel. If a construction permit (CP) holder desires to receive and store unirradiated reactor fuel before NRC issues an operating license for the plant, the CP holder should request a license to receive and store the material. Because unirradiated reactor fuel is enriched uranium, which is special nuclear material, the license should be requested under the provisions of 10 CFR Part 70.

- 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?**

Not updating this RG would not address inefficiencies imposed on applicants and staff in preparing and reviewing applications. NRC anticipates receiving one application for storage only of unirradiated power reactor fuel and associated radioactive material in the foreseeable future, specifically Bellefonte Unit 1 if the Tennessee Valley Authority makes a decision to proceed with licensing that reactor.

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

An estimate of the effort needed to revise this RG is between 0.1 FTE and 0.2 FTE.

- 4. Based on the answers to the questions above, what is the recommended staff action for this RG (Reviewed with no issues identified, Reviewed with issues identified for future consideration, Revise, or Withdraw)?**

The staff plans to revise this RG.

- 5. Provide a conceptual plan and timeframe to address the issues identified during the review.**

The draft guide is under review between NMSS/DFCSS/CDEB and the Office of Nuclear Regulatory Research. The draft guide is anticipated to be issued for public comment at the end of 2014. The final guide anticipated to be published by June 2015.

NOTE: This review was conducted in April, 2014 and reflects the staff's plans as of that date. These plans are tentative and subject to change.