

## **Regulatory Guide Periodic Review**

Regulatory Guide Number: **5.78,**  
Revision Number: **0**

### **Physical Protection of Mixed Oxide Fuels in Nuclear Power Plants**

Office: **NSIR/DPCP**

Technical Lead: **Joe Willis**

#### **Recommended Staff Action: Reviewed with no issues identified**

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

RG 5.78 was last revised in June 2010. There are no known technical or regulatory issues with RG 5.78. It is consistent with the current regulations. The current version provides sufficient guidance to holders of a reactor license under Title 10 of the Code of Federal Regulations (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," a combined license under 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants," or a fuel cycle facility license under 10 CFR Part 76, "Certification of Gaseous Diffusion Plants," having the need to possess or use special nuclear material (SNM) within their facility.

##### **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?**

No technical or regulatory issues were identified. There is no impact internal or external stakeholders resulting from use of this RG as currently written. Licensees may continue to use the information in this RG for actions that do not require NRC review and approval.

##### **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?**

No technical or regulatory issues were identified; hence, no resources are required.

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

There is no planned action for updating this regulatory guide at this time; therefore, there will not be any need for FTE or contractor resources.

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

The staff concludes that the document is acceptable as is. There is no need for a plan to address issues.

**Note: This review was conducted in September 2025 and reflects the staff's plans as of that date. These plans are tentative and subject to change**