

## **Regulatory Guide Periodic Review**

Regulatory Guide Number: **5.26**  
Revision: **1**

Title: **Selection of Material Balance Areas and Item Control Areas**

Office/division/branch: **NMSS/FCSE/MCAB**

Technical Lead: **Glenn Tuttle**

Recommended Staff Action: **Reviewed with issues identified for future consideration**

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

The NRC no longer has specific regulations governing Material Balance Areas (MBAs) and Item Control Areas (ICAs). The current RG governing MBAs and ICAs, which this is intended to replace, was developed in 1975 and provided guidance on 10 CFR 70.58. 10 CFR 70.58 was deleted in 2002, and replaced by new rules in Part 74. However, the new rules did not carry over the MBA and ICA requirements, so currently there are no regulations governing MBAs and ICAs. Current rulemaking is underway to revise 10 CFR Part 74, including reinstating the requirement for establishment of MBAs and ICAs. However, staff is currently resolving public comments on the rulemaking, and the rulemaking will not be final until sometime in the future.

In addition to the regulatory issues, there are technical issues regarding terminology used in the RG related to inventories and their evaluation. The current RG uses outdated terms such as “material unaccounted for” and “limits of error of the material unaccounted for,” and their acronyms, MUF and LEMUF, respectively. The current relevant terms, used in the regulations and other guidance documents, are “inventory difference” and “standard error of the inventory difference,” known as ID and SEID, respectively.

**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?**

Current licensees already use MBAs and ICAs. Establishment of MBAs and ICAs is a standard practice. Current licensees are also familiar with the terms ID and SEID, since they have been used since the 1980s. Also, current guidance in MC&A related NUREG documents includes a discussion of MBAs and ICAs.

For future applicants, using the current RG might be confusing because of the reference to 10 CFR 70.58, and the use of outdated terminology. However, the NUREG documents provide a standard format for developing their MC&A programs and these NUREGs are current.

For NRC reviewers, the issues identified are well known and understood, and would not have an impact on licensing activities.

**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 correct the identified issues is between 0.10 full-time equivalent (FTE) and 0.20 FTE.

**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)?**

The MC&A staff has reviewed the RG and determined that the RG can be used “as is,” with issues identified for future consideration.

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

The staff will submit the final Part 74 rule language to the Commissioners in November 2015. Once the staff has the Commissioners direction for proceeding, the staff will revise the RG, as needed, addressing the regulatory and technical issues mentioned in Question 1 above.

**NOTE: This review was conducted in April 2015, and reflects the staff’s plans as of that date. These plans are tentative and subject to change.**