



# Update – Material Control and Accounting Part 74 Rulemaking

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# Discussion Points

- Background
  - Commission approved rulemaking limited to revising and consolidating the MC&A regulations in Part 74
- Major Topics
  - Clarify certain requirements
  - Add/modify certain requirements to MC&A activities
  - Consolidate MC&A requirements for ISFSIs from Part 72
  - Revise associated guidance documents
- Schedule

# Major Topics

- Consider to clarify certain requirements
  - Definitions
    - New terms
      - accounting, custodian, item control area, item control, material balance area, material control and accounting, two-person rule
    - Amended terms
      - formula quantity, SNM of low strategic significance, SNM of moderate strategic significance
    - Added Appendix A, a table showing how the categories of SNM are calculated
    - Remove the term “effective kilogram”
  - Replace the term “FNMC plan” with the term “MC&A plan”
  - Use “calendar days” (e.g., 370 days versus annual, 65 days versus bimonthly)
  - Use “MC&A program” and refer to other elements of the program as “systems” or “procedures” (e.g., item control system, tamper-safing procedure)

# Major Topics (continued)

- Consider to add/modify certain requirements
  - Subpart A, General provisions
    - Scope would include ISFSIs (spent fuel)
    - General performance objectives for all SNM licensees
  - Subpart B, General reporting and recordkeeping
    - Replace prescriptive inventory reporting dates (Category I facilities)
    - Replace one effective kilogram with 350 grams
    - Introduce a requirement for item control system
    - Revise to clarify NMMSS reporting requirements
    - Revise requirement to perform tests on foreign fuel and sources

## Major Topics (continued)

- Consider to add/modify certain requirements
  - Subpart C, SNM of low strategic significance
    - Revise general performance objectives
      - Change one effective kilogram to 350 grams
      - Align objectives with new cite in subpart A
    - Remove exemptions from the item control system
      - Items existing for less than 14 days
      - 500 grams per item, 50 kilograms total
    - Introduce a requirement for tamper-safing containers or locations
    - Introduce a requirement for two-person rule to perform certain operations
    - Introduce a requirement for designating MBA, ICA, and custodians

# Major Topics (continued)

- Consider to add/modify certain requirements
  - Subpart D, SNM of moderate strategic significance
    - Align performance objectives with new cite in subpart A
    - Remove exemptions from the item control system
      - Items existing for less than 14 days
      - Items each containing 200 grams of Pu or U-233 or 300 grams or more of U-235
      - cumulative total of one formula kilogram of strategic SNM or 17 kilograms of U-235 contained in uranium enriched to 10 % but less than 20%
    - Revise the tamper-safing program requirement as per proposed text in other subparts
    - Introduce a requirement for two-person rule to perform certain operations
    - Introduce a requirement for designating MBA, ICA, and custodians

# Major Topics (continued)

- Consider to add/modify certain requirements
  - Subpart E, Formula quantities of strategic SNM
    - Align performance objectives with new cite in subpart A
    - Remove “an irradiated fuel reprocessing plant” from the list of exempted facilities
    - Revise the tamper-safing program requirement as per proposed text in other subparts
    - Specify a requirement for two-person rule to perform certain operations
    - Introduce a requirement for designating MBA, ICA, and custodians

# Major Topics (continued)

- Consolidate MC&A requirements for ISFSIs (spent fuel) from Part 72
  - Recordkeeping requirements
  - Emergency notification
  - NMMSS reporting

# Major Topics (continued)

- **Revise associated guidance documents**
  - NUREG-1280, Rev. 1, “Standard Format and Content Acceptance Criteria for the Material Control and Accounting (MC&A) Reform Amendment,” 1995
  - NUREG-1065, Rev. 2, “Acceptable Standard Format and Content for the Fundamental Nuclear Material Control (FNMC) Plan Required for Low-Enriched Uranium Facilities,” 1995
  - NUREG/CR-5734, “Recommendations to the NRC on Acceptable Standard Format and Content for the Fundamental Nuclear Material Control (FNMC) Plan Required for Low-Enriched Uranium Enrichment Facilities,” 1991
  - NUREG/BR-0096, “Instructions and Guidance for Completing Physical Inventory Summary Report,” 1992
  - In addition, the staff is developing a new guidance document for Category II facilities because there is no current document.

- Schedule and Milestones
  - 5/2011: Post draft rule text on Federal eRulemaking portal at <http://www.regulations.gov> (Docket #NRC-2009-0096)
  - 9/2011: Submit proposed rule package to the Commission
  - 12/2011: Draft rule and revised NUREG guidance documents available for public comment



# Questions & Answers