

**NMMSS Users Annual Training Meeting  
Atlanta, Georgia—May 22-24, 2007**

# **Regulatory Improvements to The Nuclear Materials Management and Safeguards System: Proposed Rule**

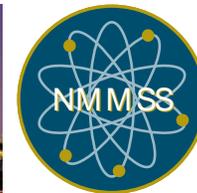
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Materials and Environmental  
Management Programs**

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Sponsored by the US Dept. of Energy &  
the US Nuclear Regulatory Commission

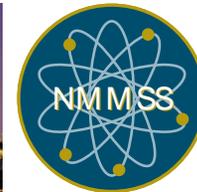
# Proposed Rule

- Was published in the Federal Register on February 6, 2007 (72 FR 5348) for public comments.
- Comment period ended on April 23, 2007.
- 4 comments were received.
- NRC also posted an FAQ on the rulemaking website.



# Time Line for the Final Rule

- Is due to the Commission in December 2007.
- Publication of the final rule must have Commission approval.
- Effective date: typically 90 days from publication of the final rule in the Federal Register. May allow longer time so the licensees have time to revise procedures and provide training to implement the final rule (mid-2008).



# Background

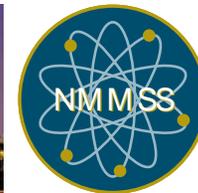
- October 2001: The DOE IG reported that based on an audit of the NMMSS, DOE could not fully account for DOE materials at licensee sites.
- May 2003: The NRC IG reported similar concerns.

Both reports are available, references provided in the FRN



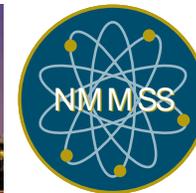
# Background (Cont.)

- The NRC IG recommended to require smaller licensees (those possessing 350 grams or less SNM to make annual reports to the NMMSS).
- October 2003, NRC issued Bulletin 2003-04 "Rebaselining of Data in the Nuclear Materials Management and Safeguards System."
- May 2005: Recommendations forwarded to the Commission in SECY-05-0078 to amend NMMSS reporting regulations.



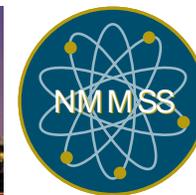
# NMMSS REPORTING REQUIREMENTS

- 10 CFR 40.64 (source material)
- 10 CFR 72.76 & 72.78 (spent fuel)
- 10 CFR 74.13 & 74.15 (SNM)
- 10 CFR 75.34 & 75.35 (IAEA)
- 10 CFR 150.16 & 150.17 (requirements for Agreement State licensees)



# Source Material Transaction Reports

- Current: section 40.64(a) requires submission of a Nuclear Material Transaction Report whenever a licensee transfers, receives, imports, exports or adjusts the inventory of **foreign obligated** source material by one kilogram or more.
- Proposed: would also require reporting when a licensee uses 1 kilogram or more of source material in enrichment services, downblend material initially enriched in the U-235 isotope to 10 percent or more, or mixed oxide fuel fabrication, **regardless of obligation.**



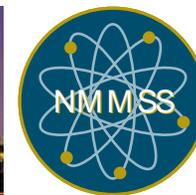
# Source Material Status Reports

- Current: section 40.64(b) requires annual source material inventory reports of foreign obligated source material for licensees authorized to possess more than **1000 kilograms** of source material.
- Proposed: would require annual reporting for licensees that possess **1 kilogram** or more of foreign obligated source material.



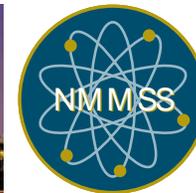
# Special Nuclear Material Status Reports

- Current : requires annual SNM inventories to the NMMSS only if they are authorized to possess more than **350 grams** of SNM.
- Proposed : would require annual reporting by licensees that possess **1 gram** or more of SNM. Submission of material balance reports for licensees possessing less than 350 grams, **no later than March 31 of each year.**



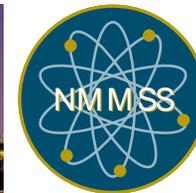
# Special Nuclear Material Transaction Reports

- Current: licensees are required by 10 CFR 74.15(a) to report to the NMMSS whenever they transfer or receive one gram or more of SNM.
- Proposed: would also require reporting to the NMMSS whenever a licensee makes an on-site adjustment to the SNM inventory by 1 gram or more. (The inventory adjustments may be due to decay, normal operational losses or accidental losses.)



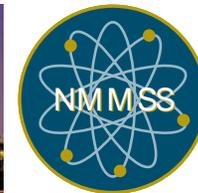
# Special Nuclear Material Transaction Reports (Cont.)

- Proposed: requires each licensee who transfers SNM (1 gram or more) to submit a nuclear material transaction report no later than the close of business the next working day, and each licensee who receives the material to submit a nuclear material transaction report within ten days after the material is received.



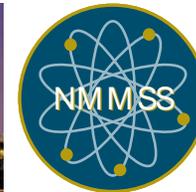
# Reconciliation of Submitted Inventories

- A new definition , “reconciliation,” would be added to describe the process by which licensees’ reports are evaluated and compared by the NRC to the projected material balances by the NMMSS.
- Would require licensees to reconcile any inventory discrepancies identified by the NRC within 30 days of NRC’s notification of the identified discrepancy to the licensee.



# Reduction in Reporting Requirements for Export of Material Shipments

- Currently, licensees who export reportable quantities of SNM or source material file both the shipper's and receiver's information on two separate forms when exporting nuclear material, as described in NUREG BR/0006.
- Proposed: licensees would be required to **file only the shipper's information** unless a significant shipper/receiver difference, or, a theft or diversion is identified.



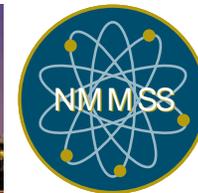
# AFFECTED LICENSEES

- Currently, approximately 180 licensees (possessing more than 350 grams of SNM) report inventory and material balance information annually to the NMMSS.
- Proposed: would affect approximately 200 additional NRC and Agreement State licensees (proposed rule makes conforming amendments to Part 150 “Exemptions and Continued Regulatory Authority in Agreement States and in Offshore Waters Under Section 274”) that presently possess between 1 and 350 grams of SNM.



# AFFECTED LICENSEES (cont.)

The reduction in reporting requirements associated with export of SNM and source material would impact approximately 17 NRC and Agreement State licensees resulting in a reduction of about 1,700 reports per year to the NMMSS, without impacting the quality of information in the NMMSS database.



# CONCLUSION

- The proposed amendments are needed to improve the data maintained in the NMMSS.
- The proposed amendments would reduce some regulatory burden by reducing the current requirements related to the export of SNM and source material. However, annual reporting will be new requirements for licensees that possess 350 grams or less of SNM.

