

Physical Inventories and the Importance of Investigations When Inventory Differences are Beyond Control Limits

2013 Fuel Cycle Information Exchange (FCIX)

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June 2013



Overview

- NRC's Strategic Security Goal
- Physical Inventories and Resolution Program Importance
- NRC Expectations for Licensee Reporting and Resolution
- NRC Oversight and Enforcement
- Reporting Requirements for the NRC
- Path Forward





NRC's Strategic Security Goal

- Goal: Ensure adequate protection in the secure use and management of radioactive materials
- Strategic Outcomes
 - Prevent instances where licensed radioactive materials are used domestically in a manner hostile to the United States
 - Prevent unauthorized public disclosures of classified or Safeguards Information through quality measures



Importance of Physical Inventories and Inventory Difference (ID) Resolution

- How physical inventories fit into the MC&A Program
 - Confirms SNM Presence
 - Verifies accuracy and reliability of records
 - Detects the loss, theft, or diversion of SNM.



NRC Expectations for Physical Inventory Reporting and ID Resolution

- Expectations of Reporting and Investigations :
 - Reporting physical inventories
 - Material Balance Reports (DOE/NRC Form 742)
 - Physical Inventory Summary Reports (NRC Form 327).
 - Investigation and Resolution
 - Resolved in a timely manner
 - Identify causes/probable causes
 - Establish corrective actions



NRC Oversight and Enforcement

- Inspectors specialized in MC&A
- Oversight by MC&A Branch of NMSS
- Standard NRC enforcement actions
 - Notices of violation
 - Monetary fines
 - Orders to modify, suspend, or revoke a license or require specific actions





Special Reporting Requirements

- Annual report to Congress on abnormal occurrences
 - NUREG-0090

 International Atomic Energy Agency's Incident and Trafficking Database Program (ITDP)



Path Forward

- Update of related Regulatory Guides
 - Regulatory Guide 5.13, "Conduct of Nuclear Material Physical Inventories"
 - Regulatory Guide 5.33, "Statistical Evaluation of Material Unaccounted For"
- Incorporate Lessons Learned
 - MC&A Inspection Program
 - MC&A Program Oversight



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Questions?

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