



Accountability
Performance
Accuracy

The Nuclear Materials Management Safeguards System

NMMSS

2016

Annual Users Training Meeting

May 9-12, 2016 | New Orleans, LA

MC&A Inspection Perspective Fuel Facilities

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A Bit of Background

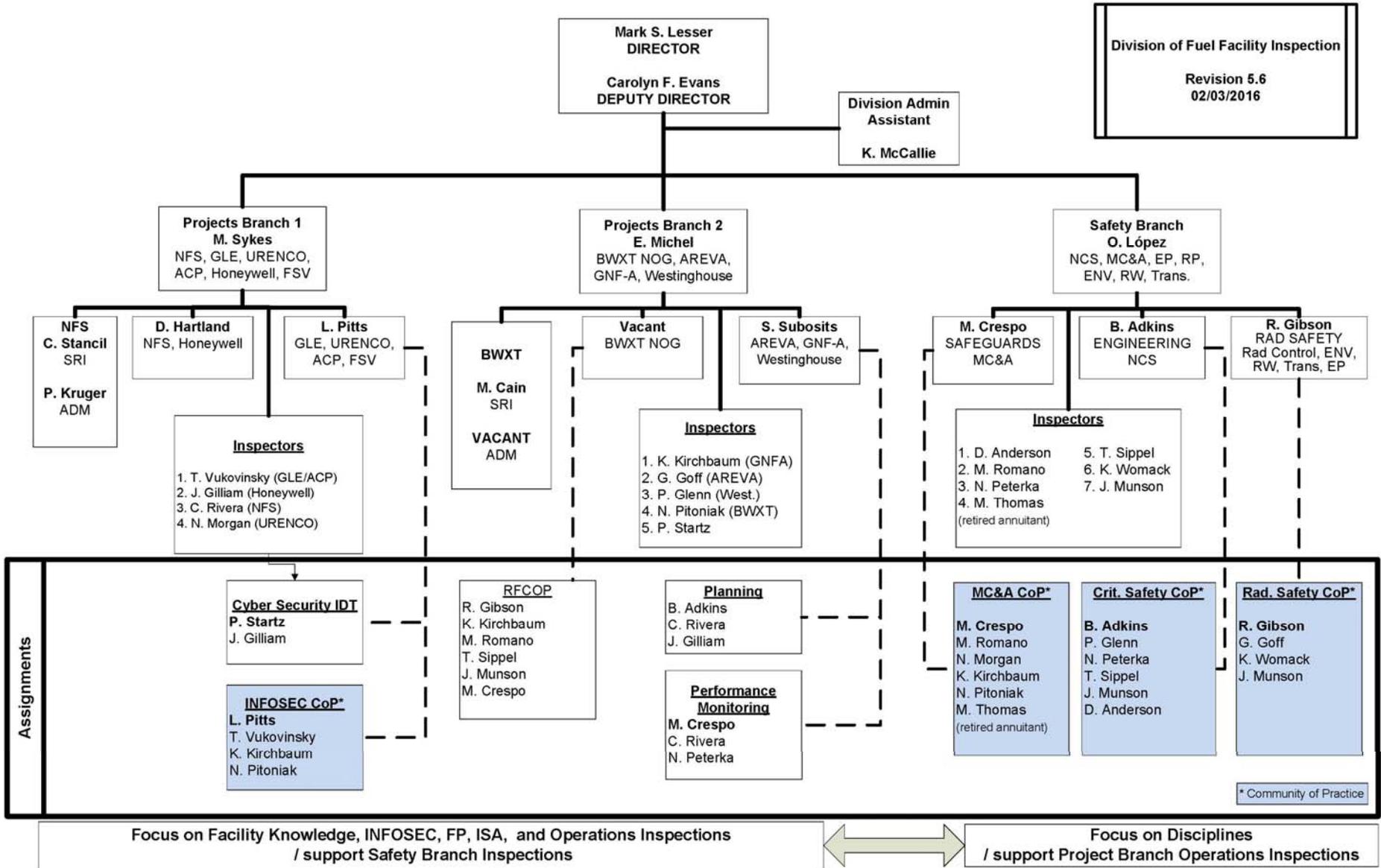
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- Atomic Energy Commission split and NRC became license issuer at fuel facilities in 1974
- 10CFR Part 74 and Oversight and Inspection Responsibility
- Region II, NMSS, NSIR and their roles
- Org charts for reference
- Since 2014 all MC&A inspections conducted from Region II, Division of Fuel Facility Inspection







MC&A Inspections

- Biannual
 - BWXT, Lynchburg, VA
 - NFS, Erwin, TN
- Annually
 - GNFA, Wilmington, NC
 - Westinghouse, Columbia, SC
 - AREVA, Richland, WA
 - URENCO, Eunice, NM
 - (+ periodic inventory observations)
- Why? Types of facilities, Regulations, and NRC MC 2600



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Importance of MC&A and Oversight

Why is MC&A important:

- To provide assurance that nuclear materials are accounted for properly.
- To detect theft or diversion of nuclear materials.
- To act as an integral component of the safeguards system that deters theft or diversion of nuclear materials.



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Current Themes and Issues

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- General recent issues (not necessarily violations)
- Scheduling in advance to better accommodate times of year for licensees, also taking inventories into consideration
- Asking for documents in advance for review prior to inspections
- Periodic paring of MC&A inspections with Physical Security or Criticality Safety
- Tips for success



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Role of NMMSS in MC&A Inspections

- NMMSS special requests and former DOE and NRC requests
- How we currently do it
- Prior to
- Onsite
- Types of important NMMSS information for inspectors:
 - 741 and 742 accuracy and timeliness
 - Closing open items
 - Timely reconciliation
 - Resolving shipper/receiver differences
 - Limits of error
 - Import/export compliance and obligations





Inspection of key reporting requirements:

- § 74.13 Material status reports
 - Each licensee who had possessed in the previous reporting period special nuclear material in a quantity totaling one gram or more of contained uranium-235, uranium-233, or plutonium shall complete and submit a Material Balance Report concerning special nuclear material that the licensee has received, produced, possessed, transferred, consumed, disposed, or lost. (DOE/NRC form 742)
- § 74.15 Nuclear material transaction reports
 - Each licensee who transfers the material shall submit a Nuclear Material Transaction Report. (DOE/NRC Form 741)





Current Situation and Discussion

- Revised Fuel Cycle Oversight Process Status
 - SECY-16-0005, Cornerstone Development for the Revised Fuel Cycle Oversight Process and Votes
- Qualifying MC&A Inspectors
 - Process, NRC Manual Chapter 1247
 - Study guides and On the Job qualifications
 - Availability of Training (NTC, LANL, etc.)
- Comments/Questions/Discussion?
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