Counterfeit, Fraudulent, And Suspect Items (CFSI)

4th Public Meeting
Post-SECY 11-0154
February 13, 2013

Public Meeting

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U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Cyber Security Supply Chain

•NSIR oversees cyber security policy, guidance, and licensing activities for NRC licensees.

•When the source of cyber threats can be attributed to elements in the supply chain a collaborative effort between NRO and NSIR is necessary to address cyber threats.

• Ongoing Activities
   •Inspection Implementation
   •Guidance documents

Upcoming CFSI Proposed Category 3 Meetings

Commissioner Hearing Room
Wednesday, March 20, 2013 1:00 – 5:00pm
Monday, April 22, 2013 from 1:00 – 5:00pm

Two White Flint Room T10A01
Wednesday, May 29 2013 from1:00 – 5:00pm
Wednesday, June 26, 2013 from 1:00 – 5:00pm
Wednesday, July 31, 2013 from 1:00 – 5:00pm

NUREG/BR-0500
"Safety Culture Policy Statement"
June 2011   (ML11165A021)

"This policy statement applies to …holders of quality assurance program approvals, vendors and suppliers of safety-related components…"

➢ **Problem Identification and Resolution**
Issues potentially impacting safety are promptly identified, fully evaluated, and promptly addressed and corrected commensurate with their significance.

➢ **Questioning Attitude**
Individuals avoid complacency and continuously challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action.

POLICY ISSUE
(INFORMATION)

ML112200150

October 28, 2011   SECY-11-0154

FOR: The Commissioners

FROM: R. W. Borchardt
                  Executive Director for Operations

SUBJECT: AN AGENCYWIDE APPROACH TO COUNTERFEIT, FRAUDULENT,
                  AND SUSPECT ITEMS

PURPOSE:

This paper informs the Commission of the staff's plans to identify and implement proactive strategies to detect and prevent the intrusion of counterfeit, fraudulent, and suspect items (CFSI) into equipment, components, systems, and structures regulated by the U.S. Nuclear Regulatory Commission (NRC).

SUMMARY:

This paper provides the Commission with the staff's agencywide strategy and plan to monitor and evaluate CFSI potentially impacting NRC-regulated activities. The paper also documents the staff's assessment of the current regulations, guidance, and licensee procurement processes associated with preventing the intrusion of CFSI into NRC regulated activities.

The staff assembled an internal task force comprised of representatives from the various offices potentially affected by the CFSI issue. As part of this effort four working groups were formed to assess activities and potential vulnerabilities in its specific area including reviewing best practices from several external sources, from the commercial nuclear industry, other heavy industry business sectors, and Federal agencies and law enforcement organizations. The staff also interacted with representatives from the Nuclear Procurement Issues Committee (NUPIC) and the Electric Power Research Institute (EPRI) in developing this paper.

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SECY 11-0154
CFSI Response Shift
Reactive ➔ Proactive

Pre 11-0154

RESOURCES

| Prevention | Identification | Communication | Response | Elimination |

Post 11-0154

TIME
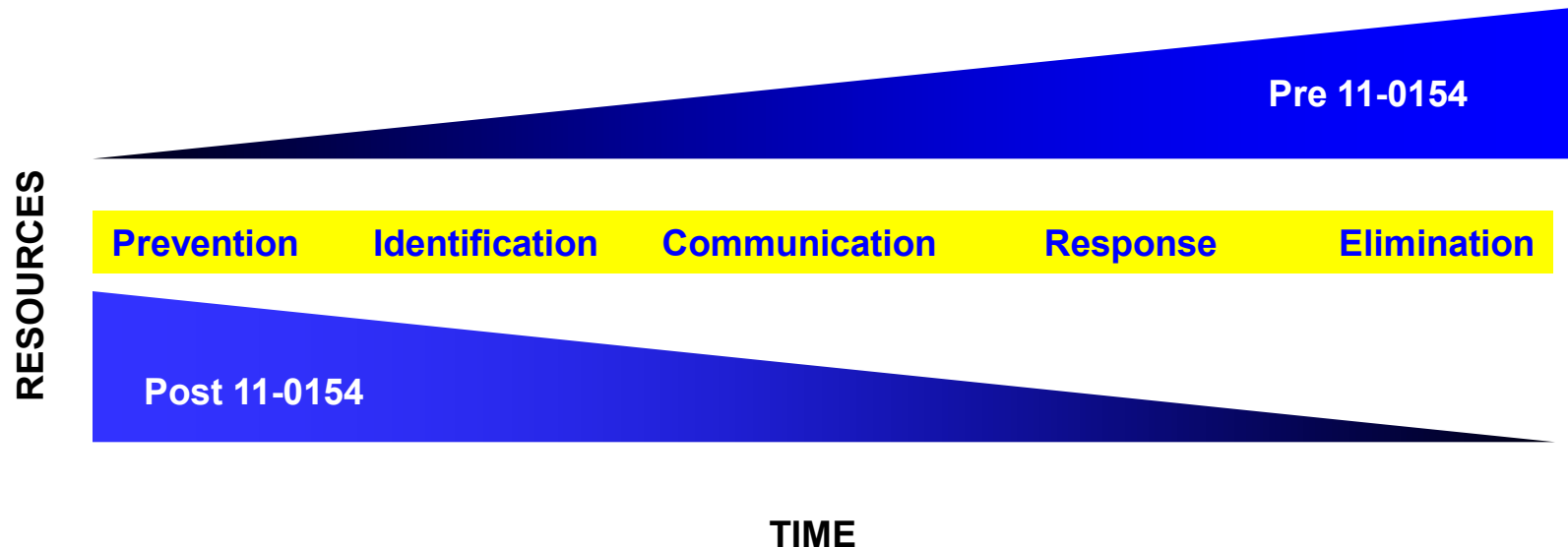
Basic Nuclear Supply Models

10 CFR 50, Appendix B
10 CFR Part 21

The Nuclear Community

The Commercial Community
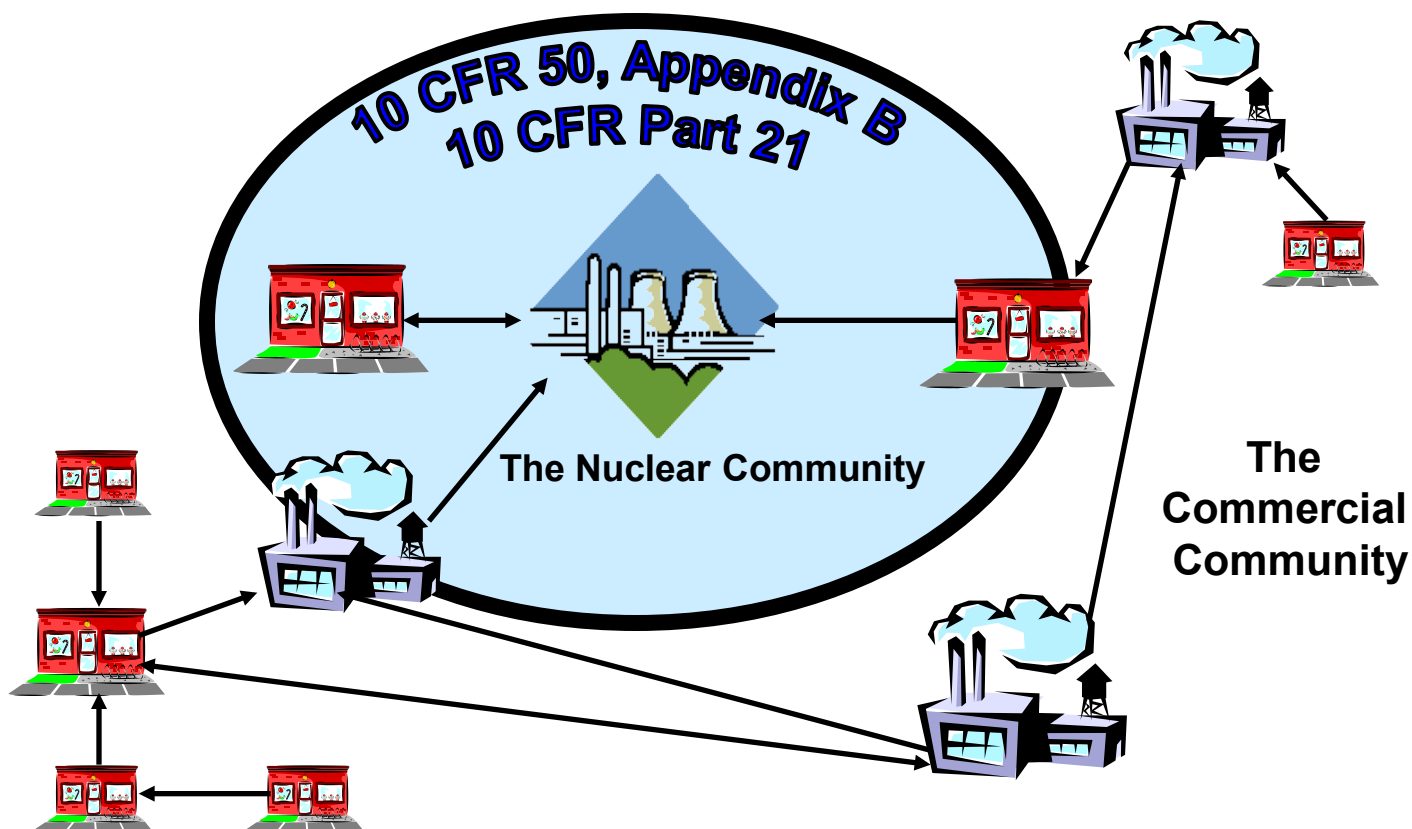
SECY-11-0154
Overview of Actions to Address CFSI

19 Planned Actions

(opportunities to enhance CFSI processes)

Five implementation categories to consolidate similar issues

- *Industry process enhancements and best practices*
- *Regulatory guidance*
- *Communication*
- *Training*
- *Industry oversight for detecting & preventing CFSI*

CFSI Implementation

1. **Industry process enhancements & best practices**
   - (11) voluntary initiatives (In-prog)
   - Possible Generic Communications (In-prog)

2. **Regulatory guidance**
   - Addition of CFSI to Part 21 guidance (In-prog)
   - Endorse Voluntary Initiatives ← **ECD 2013**
   - Proposed CFSI Rulemaking to 10 CFR 50 ← **Post -Effectiveness Review)**

3. **Communication**
   - Expand OpE/ConE program for CFSI ← **Complete**
     - Program move from CEVB to CAEB ← **Complete**
     - CFSI Technical Review Group (TRG) ← **Complete**
   - Public meetings – **monthly, 1st on Feb. 13, 13**
   - Add CFSI to CAP programs (Industry Voluntary Initiative (IVI))
   - Federal Agency Outreach: Joined DHS/ICE National IPR Center ← **Complete**
     - GIDEP (In-prog)
     - Centralized clearinghouse/database (IVIs)
   - NEA Nonconforming /CFSI Task Group (NRC Chair) ← **Complete**
   - IAEA IRS & (CNS) Convention on Nuclear Safety ← **Complete 1st in 2013**

CFSI Implementation Overview

4. **Training**
   - CFSI awareness into Allegations training module ← **Complete**
   - Provided CFSI Overview to OI Inspectors ← **Complete**
   - Provided CFSI Awareness to NRC staff (Region I: In-prog)
   - Issued IN 2012-21, CFSI Training Offerings ← **Complete**
   - Formal Inspector training module in development ← **ECD 2013**

5. **Industry oversight for detecting & preventing CFSI**
   - NRC inspections
     - ➢ Vendor inspections (in-Prog) ← **ECD 2013**
     - ➢ Licensee procurement, ROP/cROP (pilots) ← **ECD 2013**
     - ➢ Suppliers of CDAs (sample population) – Cyber (In-prog)
   - Licensee audits of suppliers ← (In-prog)
     - ➢ Manufacturers
     - ➢ Dedicating entities
     - ➢ Supplier-to-supplier audits
     - ➢ CFSI added to VIPP ← **Complete**

Voluntary CFSI Initiatives

1) *Develop a plan for implementing "proactive" CFSI strategies*

2) *Develop a method for sharing CFSI Information, including issues identified during receipt inspection and during commercial grade dedication*

3) *Develop an industry accepted practice for using the corrective action program and nonconformance programs for entering CFSI related to <u>safety related</u> components*

4) *Develop an industry accepted practice for using the corrective action program to enter <u>non-safety related</u> CFSI into the corrective action program*

5) *Establish an industry CFSI database*

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Voluntary CFSI Initiatives

6) *Incorporate industry best practices for quarantining CFSI items and removing them from the supply chain without returning them to the supplier*

7) *Incorporate industry best practices for identifying and informing the industry of CFSI trends*

8) *Incorporate industry best practices for enhancing commercial-grade dedication, and receipt inspection practices to account for CFSI*

9) *Incorporate industry best practices for product authentication of complex items that will provide additional assurance for preventing CFSI*

10) *Incorporate industry best practices for using batch sampling with authentication testing*

11) *Incorporate industry best practices for the use of standardized anti-CFSI language in procurement documents*

Plan for Going Forward

Prioritize the (11) Industry Voluntary Initiatives:

- ➢ Highest net gain to prevent CFSI
- ➢ Ready for implementation

Develop Plans for Highest Priority Items:

- ➢ Include Estimated Completion Dates (ECDs)
- ➢ Include any requests for support resources

Schedule Monthly (Category 3) Public Meetings   ← **Complete**

- ➢ Working sessions to fully develop highest priority items
- ➢ Including focus topic discussions & general CFSI discussions

Implementation Commitment:

- ➢ Plan submittal to staff
- ➢ Staff endorsement
- ➢ Industry commitment
- ➢ Change Management

NRC Effectiveness Reviews:

- ➢ Determine characteristics of "effective" and sample population
- ➢ Develop a schedule to perform the reviews
- ➢ Issue Temporary Instruction (internal)
- ➢ Assess the results of the reviews & formulate SECY
- ➢ Issue follow-up SECY to Commissioners………………….…… **< FY 2014>**

Current CFSI Highlights

2012   Jan   The Construction Industry Institute (CII) approves additional funding to continue researching counterfeit materials inn the construction industry (RT-307)

          Nov   INPO Event Report IER-4-12-86, "Counterfeit Parts and Equipment Vulnerability" issued w/action statement: "Plants are expected to consider corrective actions provided in this document and to develop applicable corrective actions."

          Dec   Pentas Controls – DOJ press release

2013   Jan   Two South Korean plants shut down due to CFSI

          Jan   IAEA adds CFSI to Convention on Nuclear Safety (CNS) Annual reports

          Jan   IN-2012-22, "Counterfeit, Fraudulent, Suspect Items Training Offerings" issued

          Feb   NRC reinstitutes public meetings specifically to address CFSI with industry

          -     Perform SECY-11-0154 Effectiveness Reviews

2014   -   2014 - ASME NQA-1 discussing adding CFSI language to the 2014 Addenda (Part II, Requirements)

          -     SECY-11-0154 Effectiveness Review conclusions to NRC Commissioners

CFSI Resources   *at www.nrc.gov*

1. SECY-11-0154: "An Agency Wide Approach to Counterfeit, Fraudulent, and Suspect Items"   ML112200150

2. "Staff Review of Counterfeit , Fraudulent, and Suspect Items (CFSI)"   ML112130293

3. GL 91-05: "Licensee Commercial-Grade Procurement and Dedication Programs (Generic Letter)   ML9104030126

4. GL 89-02: "Actions to Improve the Detection of Counterfeit and Fraudulently Marked Products (Generic Letter)   ML8903160296

5. IN 2012-22: "Counterfeit, Fraudulent, and Suspect Items (CFSI) Training Offerings" (Information Notice)   ML12137A248

6. Table 1 to IN 2012-22, "Counterfeit, Fraudulent, and Suspect Items (CFSI) Training Offerings"   ML12318A216

7. IN 2008-04: "Counterfeit Parts Supplied to Nuclear Power Plants" (Information Notice)   ML093620098

8. IN 1989-70 S1: "Possible Indications of Misrepresented Vendor Products – Supplement 1" (Information Notice)   ML9004200525

9. IN 1989-70: "Possible Indications of Misrepresented Vendor Products" (Information Notice)   ML8910040381

Acronyms

CDA	*Critical Digital Asset*	Cyber
CFR	*Code of Federal Regulations*	USG
CFSI	*Counterfeit, Fraudulent, Suspect Item*	NRC
ConE	*Construction Experience Program*	NRC
cROP	*Construction Reactor Oversight Program*	NRC
FSME	*Federal & State Materials & Environmental Programs*	NRC
GIDEP	*Government Industry Data Exchange Program*	USG
IAEA	*International Atomic Energy Agency*	INT
INPO	*Institute of Nuclear Plant Operators*	Industry
IPR	*Intellectual Property Rights*	USG
IRS	*Incident Reporting System*	IAEA
NEI	*Nuclear Energy Institute*	Industry
NIAC	*Nuclear Industry Assessment Committee*	Industry
NMSS	*Nuclear Material Safety & Safeguards*	NRC
NUPIC	*Nuclear Procurement Issues Committee*	Industry
OPe	*Operating Experience Program*	NRC
RG	*Regulatory Guide*	USG
ROP	*Reactor Oversight Program*	NRC
SECY	*Written issues papers the staff submits to the Commission*	NRC

QUESTIONS ?

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