

CNSC

Guest Speaker Series

Managing Counterfeit, Fraudulent, and Suspect Item (CFSI) Uncertainties

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PRESENTATION TOPICS

- Responsibilities for managing CFSI uncertainties
- Update of NRC's implementation of SECY 11-0154
- CFSI communications and international activities
- CFSI uncertainty in commercial grade dedications
- Q & A

LIVING WITH RISK

- Traveling (business or pleasure)
- Clicking on an email link from someone you don't know
- Publishing Personally Identifiable Information (PII)
- Buying on the internet
- Discarding papers into the trash

Given that similar uncertainties are present in today's global supply chains supporting the commercial nuclear power industry – a similar level of awareness need to be maintained!

SAFETY CULTURE POLICY

NUREG/BR-0500 “Safety Culture Policy Statement,” – **revised June 2011** - extended Safety Culture to suppliers of safety related components.

Includes several “proactive” elements for addressing CFSI uncertainty:

- Questioning attitude
- Problem identification & resolution
- Safety centered work processes
- Environment for raising concerns

ROLES & RESPONSIBILITIES

“... act together as intelligent customers sharing parts of procurement activity such as: audits and oversight of suppliers, receipt inspections and tests, NCFSI data bases, etc. In this way, there is a larger resource available to more effectively and consistently oversee the supply chain and facilitate the sharing of experiences with NCFSI.”

-- NEA/CNRA/R (2012)7, “Regulatory Oversight of Non-confirming, Counterfeit, Fraudulent and Suspect Items (NCFSI) - Final NCFSI Task Group Report”

THE ROLE OF THE REGULATOR

“The regulatory body should, through its regulatory activities, provide assurance that the licensee meets its responsibilities for the safety of its facility. This includes assuring that the licensee provides the appropriate level of oversight of all contractors and subcontractors, commensurate with the safety significance of the activity.”

-- NEA/CNRA/R (2011)4

SECY-11-0154,
**“An Agencywide Approach to Counterfeit,
Fraudulent, and Suspect Items”**

Five Key Process Areas:

1. Regulatory guidance
2. Industry enhancements & best practices
3. Training
4. Industry oversight
5. Communication

INTERNATIONAL ACTIVITIES

IAEA: - TECDOC 1169, Managing suspect and counterfeit items in the nuclear industry,” – being revised 2014

- IRS - Incident Reporting System – CFSI code: 5.7.6

- CNS - Convention on Nuclear Safety – add CFSI data to annual reports (eff. 2013)

OECD/CNRA - Committee on Nuclear Regulatory Activity:

- NEA WGOE – Working Group on Operating Experience

- NEA WGIP – Working Group on Inspection Practices

- NEA MDEP - Multi-lateral Data Exchange Program

- NCF SI Task Group *← Note: This was a onetime member assessment of CFSI issues using their experiences*

2013 & 2014 NEW BRUNSWICK POWER CFSI ADVISEMENTS

- Recognized potential safety significance of a non-safety related item to the nuclear community
- Alerted the nuclear community without jeopardizing on-going evaluations – Limit the Extent of Condition
- Assisted the OEM in determining extent of the condition
- Sought and received expert assistance from the OEM and the OEM's Authorized Distributors
- Participated in international discussions of the incident

ACQUIRING ITEMS FOR SAFETY RELATED FUNCTIONS

Two ways to acquire items with safety related functions:

1. Procure from a 10 CFR 50, Appendix B approved manufacturer

2. Procure a commercial item and dedicate
 - “dedicating entity” (Ref. 10 CFR 21.3)
 - a) Licensee
 - b) 3rd party “dedicating entity”
 - c) Manufacturer
 - d) Sub-supplier

CFSI UNCERTAINTY vs. REASONABLE ASSURANCE

Uncertainty in critical characteristics = increased verification/validation for the dedicating entity:

- Survey
- (additional) Special testing
 - (e.g., parametric testing of electronics)
- 3rd party certification
 - Test labs
 - Document validation
- Traceability
 - Original Equipment Manufacturer (OEM)
 - Approved Appendix B program

COMMERCIAL GRADE DEDICATION

THE GOAL: For the **dedicating entity** to determine if the commercial grade item being evaluated can be **“deemed equivalent”** to an item designed and manufactured under a 10 CFR Part 50, appendix B, quality assurance program.”

Equivalency Evaluation (Ref. EPRI 1008256)

EQUIVALENCY EVALUATIONS

Evaluate:

commercially procured items intended for safety related functions to items designed and manufactured under a 10 CFR Part 50, Appendix B, quality assurance program

Four approved dedication methods:

1. Tests /inspections
2. Commercial grade survey
3. Source verification
4. Acceptable supplier/item performance record

SUMMARY

- Supply uncertainties are always present, and continuously evolving
- We are a community and everyone needs to do their part
- **NUREG/BR-0500** extended to safety related suppliers
- The regulator's role includes assuring that the licensee provides the appropriate level of oversight of all contractors and subcontractors
- The five key areas to assess “proactive” CFSI programs include:
 - Regulatory guidance
 - Sharing of best practices
 - Training
 - Industry oversight
 - Communication
- Use a questioning attitude with procurement uncertainties
- Address uncertainties when determining reasonable assurance

QUESTIONS

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