



PERIODIC BRIEFING ON NEW REACTOR ISSUES

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Executive Director for Operations

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Agenda

- **New Reactor Program Status**
- **New Reactor Vendor Inspection Program**

Overview of New Reactor Status

**Michael R. Johnson, Director
Office of New Reactors**

Status

- **Conducting thorough and timely reviews of Design Certification, Combined License, and Early Site Permit (ESP) applications**
- **Significant progress on construction inspection program**

Integrated Construction Inspection Program

- **ESP inspections**
- **QA and Engineering inspections**
- **Vendor inspections**
- **ITAAC inspections**
- **Non-ITAAC inspections
(programmatic)**
- **Assessment**

New Reactor Component Fabrication and Oversight

**Glenn M. Tracy, Director
Division of Construction Inspection
and Operational Programs**

Background

- **Early identification of need to enhance vendor oversight**
- **SECY-07-0105**
 - **Broadening scope**
 - **Improving oversight of supplier audits**
 - **Additional inspection and related guidance**

Current Program Overview

- **Focus on assuring integrity of worldwide supply chain**
- **Targeted sample of routine and reactive vendor inspections (10/year)**
- **Oversight of third-party organization activities (e.g., NUPIC)**

Current Program Overview (cont'd)

- **Oversight of vendors is provided by:**
 - **Individual licensees**
 - **Industry third-party auditors**
 - **Consensus standards organizations**
 - **NRC vendor inspection program**
- **The ultimate responsibility lies with NRC licensees**

Key Messages

- **Vendor Oversight has been enhanced**
- **Notable levels of international cooperation**
- **Lessons learned and international experience being incorporated**
- **Proactive approach has identified need for vigilance**

Presentation Topics

- **Results of Vendor Inspections**
- **Counterfeit/Substandard Parts**
- **Lessons Learned**
- **Consensus Standards**
- **Current Topics/Future Initiatives**
- **Global Regulatory Cooperation**

Topics

- **John A. Nakoski**
Chief, Quality & Vendor Branch 2,
NRO
 - **Vendor Issues**
 - **Counterfeit, Fraudulent, & Substandard Items**
 - **Lessons Learned**

Vendor Issues

- **Commercial Grade Dedication**
- **Nonconformance and Corrective Action Programs**
- **Design Control**
- **Control of Measuring and Test Equipment**

Vendor Issues (cont'd)

- **10 CFR Part 21 - Identification and Reporting of Defects and Failures to Comply**
- **Instructions, Procedures, and Drawings**
- **Control of Purchased Material, Equipment, and Services**
- **NRC Sponsored Vendor Workshops**

Counterfeit, Fraudulent, and Substandard Items

- **Inspection activities being refined**
- **Current and past operating experience**
- **Assessing industry ability to identify**
- **Hold licensees accountable**

Counterfeit, Fraudulent, and Substandard Items (cont'd)

- **Issued Information Notice 2008-04**
- **Developing internal community**
- **Interacting with broader Federal community**
- **Encouraging development of industry community**

Lessons Learned

- **Inspections enhanced by technical expert participation**
- **Timing of inspections is critical**
- **Program is strengthened by close ties with NRR and NMSS**
- **Globalization of supply chain creates additional challenges**

Topics

- **Juan D. Peralta, Chief,
Quality & Vendor Branch 2, NRO**
 - **Interaction and Relation of
Consensus Standards to Vendor
Oversight**
 - **Current Topics and Future
Initiatives**
 - **Global Regulatory Cooperation in
Vendor Oversight**

Consensus Standards and Vendor Oversight

- **Consensus standards process constitutes essential element of regulatory framework for consistent vendor oversight**

Consensus Standards and Vendor Oversight (Cont'd)

- **American Society of Mechanical Engineers (ASME)**
 - **Active participation in Code Committees**
 - **NQA-1 (Quality Assurance)**

Consensus Standards and Vendor Oversight (Cont'd)

- **International Institute of Electrical and Electronics Engineers (IEEE)**
 - **Key standards governing digital I&C (software and hardware)**
 - **Active participation by staff in standards development committees and working groups**

Current Topics and Future Initiatives

- **Application and enforcement of NRC regulations in foreign countries**
- **Clarity of 10 CFR Part 21 requirements**
- **Vendor inspections and ITAAC**

Global Regulatory Cooperation in Vendor Oversight

- **Vendor Inspection Cooperation Working Group (VICWG)**
- **Significant bilateral and multilateral cooperative efforts**
- **International vendor oversight practices**

Summary

- **Rigorous vendor oversight is crucial to maintaining the integrity of the global supply chain and new reactor safety**
- **We must have strong independent regulatory oversight**
- **There is no substitute for effective licensee oversight**

ACRONYMS

- **ASN – Autorité de Sûreté Nucléaire**
- **I&C – Instrumentation and Control**
- **ITAAC – Inspections, Tests, Analyses, and Acceptance Criteria**
- **NMSS – Office of Nuclear Material Safety and Safeguards**
- **NQA – Nuclear Quality Assurance**
- **NRO – Office of New Reactors**
- **NRR – Office of Nuclear Reactor Regulation**
- **NUPIC – Nuclear Procurement Issues Committee**
- **QA – Quality Assurance**