



# PERIODIC BRIEFING ON NEW REACTOR ISSUES

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Executive Director for Operations

June 3, 2009

# 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