



**U.S. NRC**

UNITED STATES NUCLEAR REGULATORY COMMISSION

*Protecting People and the Environment*

# **NRC Perspectives on Vendor/Supplier Challenges**

## **EPRI JUTG Meeting**

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# Topic Areas

- NRO Vendor Inspection Program
- Vendor/Supplier Nuclear Culture
- Biggest Challenge for Nuclear Suppliers
- Examples of NRC Appendix B Findings
- Examples of NRC Commercial-Grade Dedication Findings
- Examples of NRC 10 CFR Part 21 Findings
- NRO Future Vendor Inspection Activities



# NRO Vendor Inspection Program

- NRC Reorganization in February 2007
  - Two Quality and Vendor Branches in NRO Division of Construction Inspection & Operational Program
  - One Quality and Vendor Branch in NRR Division of Engineering
- NRO developing a vendor inspection program under the construction inspection program (CIP)
  - Build on existing NRC vendor inspection program
  - Increase inspection scope and frequency



# NRO Vendor Inspection Program

- IMC 2507 – Construction Vendor Inspection Program for New Reactors
  - Routine Inspection Procedure
    - Verifies that suppliers of basic components have implemented effective quality assurance (QA) procedures, policies, instructions, and plans in accordance with Appendix B of 10 CFR Part 50.
  - Reactive Inspection Procedure
    - Verifies that suppliers of basic components have developed and implemented adequate procedures to evaluate and correct conditions adverse to quality.
    - Verifies that suppliers of basic components have taken adequate corrective actions to preclude recurrence of conditions adverse to quality.
  - Procedure for oversight of industry's vendor activities
    - NRC oversight of third party auditors (e.g. NUPIC)



## NRO Vendor Inspection Program

- NRC has developed a new inspection procedure (IP) to consolidate existing guidance on Commercial-Grade Dedication (CGD).
- Public meeting with EPRI/NEI held on July 18, 2007 to discuss EPRI/NEI comments on draft IP.
- Draft Inspection Procedure 43004, “Inspection of Commercial-Grade Dedication Programs,” to be published soon.



## **Vendor/Supplier Nuclear Culture**

- Suppliers need to have a strong nuclear quality culture with a clear understanding of the applicable NRC regulations. This applies to existing and new suppliers.
- Engineering needs to be involved in CGD activities at the licensee's suppliers.
- Licensee's procurement engineering needs to be fully engaged and involved with their suppliers.
- Examples of which to be aware:
  - Existing supplier but new ownership or management.
  - Existing supplier expanding to meet new generation needs.
  - New supplier to the nuclear industry.



# Biggest Challenge for Nuclear Suppliers

- Suppliers providing a basic component or service need a clear understanding of the applicable NRC regulations and how to implement them.
  - Appendix B to 10 CFR Part 50
  - Commercial-Grade Dedication
  - 10 CFR Part 21
- Active involvement of a licensee's engineering and procurement engineering may ensure that suppliers understand the requirements.



## **Examples of Recent NRC App. B Findings**

- ISO 9001 is not a substitute for Appendix B (see SECY-03-0117).
- Purchase of basic components from sub-supplier not on the approved supplier list.
- Appendix B suppliers invoking Appendix B to commercial sub-supplier.





## Examples of Recent NRC CGD Findings

- Surveys:
  - Commercial-grade surveys are not a generic programmatic review of a supplier's quality program.
  - Commercial-grade surveys should focus on verifying the specific critical characteristics for the item being supplied/purchased.



## **Examples of Recent NRC Part 21 Findings**

- Errors in a supplier's evaluation, conclusion, and recommended reporting.
- Vendor not meeting timeliness requirements.
- No procedural guidance for determining if a significant condition adverse to quality (potential deviation) warranted a 10 CFR Part 21 evaluation.
- Vendor evaluations performed under the corrective action program were utilized as the 10 CFR Part 21 evaluations.



# **NRO Future Vendor Inspection Activities**

- NRO inspections and third party observations
- Allegation-related inspections
- Support NRR vendor inspection activities, as necessary



**Questions??**