

3rd Workshop on Vendor Oversight for New Reactor Construction

NRC's Vendor Inspection & Quality Assurance Update

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Vendor Inspection and Quality Assurance (QA) Branches

- Accomplishments since the June 17, 2010 Vendor Oversight for New Reactor Construction Workshop:
 - ~ Completed more than 50 vendor and quality assurance implementation inspections
 - ~ Implemented the Vendor Inspection Program (VIP) Plan
 - ~ Became the Vendor Inspection Center of Expertise (COE)
 - ~ Updated our Public Website

Vendor Inspection Program (VIP) Plan

- VIP Plan was developed in response to a recommendation made by the NRC's Office of the Inspector General (OIG) during an audit of our Vendor Inspection Program
- The VIP Plan establishes goals, priorities, performance metrics and resource management strategies for vendor activities
- VIP Plan is publicly available
 - ~ <http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-insp.html>
 - ~ Agencywide Document Access and Management Systems (ADAMS Accession No. ML12094A111)

Center of Expertise (COE)

- The Vendor Inspection Center of Expertise (COE)
 - ~ Streamlines management chain for vendor inspections
 - ~ Formalizes coordination and serves in a support role to Allegations and Operating Experience/Construction Experience to strengthen vendor program and ensure uniform enforcement
 - ~ Evaluates the need to integrate efforts with the reactor oversight program for a limited assessment of licensees' procurement programs, a proactive strategy identified in the agency wide staff assessment of counterfeit, fraudulent, and suspect items (CFSI).
 - ~ To re-align critical resources based on evolving NRO workload and responsibilities

Public Websites

- The Quality Assurance for New Reactors Website offers a variety of information including:
 - ~ QA Implementation Inspection Reports and Applicant/Vendor Responses
 - <http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/qual-assure-license/inspect-reports/2011/>
 - ~ Vendor Inspection Reports and Vendor Response
 - <http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-insp-reports/2012/>
 - ~ Regulations, Guidance, and Communications for New Reactors
 - <http://www.nrc.gov/reactors/new-reactors/regs-guides-comm.html>
 - ~ Workshops on Vendor Oversight for New Reactor Constructions
 - <http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-oversight.html>

Appendix B and NQA-1

- Appendix B to 10 CFR 50 is the regulatory requirement for QA which applies to Applicants and Licensees (and contractually imposed upon safety-related contractors)
- The American Society of Mechanical Engineers (ASME) NQA-1 is a standard for implementing quality assurance requirements
- The NRC has endorsed NQA-1-2008 and NQA-1a-2009 as an acceptable method of meeting Appendix B in Regulatory Guide (RG) 1.28, Revision 4

Common Appendix B Misunderstandings

- Invoking NQA-1-2008 and NQA-1a-2009 alone in procurement documents does not meet the regulatory requirements for safety-related components or services
- Procurement documents should invoke Appendix B
- Meeting the intent of Appendix B does not fulfill the regulatory requirements of Appendix B
- Vendor should be implementing a documented Appendix B QA program for their scope of supply

NQA-1 and ASME NCA 4000

- NCA-4000 provides quality assurance requirements for Class 1, 2, 3, CS, MC, and CC items
- ASME Section III subsection NCA-4000 requires use of NQA-1 for code activities
- NQA-1 and NCA-4000 work together to meet the requirements of Appendix B for component manufacturers
- 10 CFR 50.55a requires the use of NQA-1 for ASME Section III, XI and OM Code activities

ISO 9001 and Appendix B

- ISO 9001 does not meet the requirements of Appendix B
- SECY-03-0117 reviewed ISO 9001-2000 against the existing framework of Appendix B
- ~ <http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/quality-assure-regs.html>

Safety Culture

- The Commission defines **Nuclear Safety Culture** as the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.



Consider safety culture at construction sites and vendors facilities throughout the supply chain



Questions

