



United States Nuclear Regulatory Commission

Protecting People and the Environment

NRC Report

NUPIC Meeting

Cherry Hill, NJ

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Office of New Reactors

Topic Areas

- NRC Vendor Inspections
- Joint Utility Audit Observations
- International Cooperation
- Commercial Grade Calibration Services
- NRC/NQA-1 Interactions
- Generic Communications

Completed Vendor Inspection Activities

- Vendor Inspections
 - Tioga Pipe Supply Company, Inc., 3/2008
 - AREVA–NP GmbH, 3/2008
 - Namco Controls, 4/2008
 - PCI Energy Services, 5/2008
 - Mitsubishi Heavy Industries, 5/2008
 - Doosan, 5/2008
 - Invensys, 5/2008
- Third Party Oversight
 - RPT Audit, 3/2008

NRC Vendor Inspections

Tioga Pipe Supply Company, Inc. – Philadelphia, PA

- Summary of findings:
 - Violation to 10 CFR Part 21 due to failure to have adequate procedure
 - Failure to initiate a corrective action report after repetitive nonconformances were identified and when notified of a nonconforming condition by a customer
 - Failure to implement formal document control measures to assure uniformity between guidance provided in the QSM and guidance presented in their QSPs
 - Failure to have adequate separation of non-stainless steel metal pins and unapproved and “unqualified” taping material
 - Failure to specify requirements for the storage and preservation of QA records

NRC Vendor Inspections

AREVA – NP GmbH – Erlangen, Germany

- Summary of findings:
 - Violation of 10 CFR Part 21 due to inadequate procedures
 - Failure to have sufficient evidence to support the closure of nonconforming conditions
 - Failure to provide adequate guidance for:
 - The review of corrective actions to determine if they are being completed in a timely fashion and their effectiveness to preclude recurrence
 - Establishing the significance level of nonconformances and priority of their associated corrective actions.

NRC Vendor Inspections

Namco Controls – Lancaster, SC

- Summary of findings:
 - Dedication Program – Failure to have adequate basis to support sampling program
 - Surveys did not include verification of suppliers' control of critical characteristics
 - Procurement documents did not impose quality requirements verified during surveys
 - Failure to include objective evidence in audit reports to support conclusions
 - Failure to adequately close CARs

NRC Vendor Inspections

Namco Controls – Lancaster, SC

- Summary of findings (cont.):
 - Violation of 10 CFR Part 21 for:
 - Failure to have adequate procedures to evaluate deviations
 - Failure to include Part 21 applicability in procurement documents to Appendix B suppliers
 - Measuring and Test Equipment:
 - Failure to have historical records of calibrations performed
 - Failure to include checklists in the external audit reports of commercial calibration services
 - Additional Non-conformances in the areas of Design Control and Training

NRC Vendor Inspections

PCI Energy Services - Lake Bluff, IL

- Summary of findings:
 - Failure to have adequate procedures to evaluate deviations to comply with the time limits specified in Part 21
 - Failure to provide a welding procedure to their sub-supplier to ensure that test specimens were properly prepared and tested in support of PCI's qualification procedures
 - Failure to readily identify and retrieve records of activities affecting quality

NRC Vendor Inspections

Invensys – Irvine, CA

Mitsubishi Heavy Industries – Kobe, Japan

Doosan – Changwon, Korea

- Reports are still in Draft – Potential findings were identified
- Will discuss at next NUPIC meeting

Joint Utility Audit Observation

- From March 25 to 28, 2008, NRC staff observed a joint utility audit at RTP Corporation in Pompano Beach, FL
 - Florida Power & Light sponsored this non-NUPIC audit with supporting participation of Constellation and Exelon. The audit team used the NUPIC process, but the audit report was not placed in the NUPIC database.
- NRC staff used the following Inspection Procedures (IPs):
 - IP43005, “NRC Oversight of Third-Party Organizations Implementing Quality Assurance Requirements”
 - IP36100, “Inspection of 10 CFR Parts 21 and 50.55(e) Programs for Reporting of Defects and Noncompliance”
- The NRC’s purpose was to:
 - Assess the joint utility QA audit process used for suppliers of components to the nuclear industry
 - Inspect RTP’s 10 CFR Part 21 program

Joint Utility Audit at RTP Corporation

- The NRC determined that the audit team effectively implemented the NUPIC audit process
 - The joint utility audit team identified seven (7) performance-based findings for failures to adequately implement QA program requirements
- NRC Inspection Report identified two (2) violations of 10 CFR Part 21 requirements
 - Failure to have adequate procedure:
 - Failure to have appropriate procedure to evaluate deviations and failures to comply
 - Failure to have interface of the corrective action and nonconformance reporting processes with the Part 21 program
 - Failure to have objective evidence that they had prepared or maintained records necessary to accomplish the purposes of 10 CFR 21.51

International Cooperation

- Interaction with counterparts in several areas, including:
 - Joint activities conducted with Canadian, Finnish, French, German, Korean, and Japanese regulators
 - NRC inspector rotation at STUK and Olkiluoto 3 in Finland
 - Observation of United Kingdom regulator interactions regarding General Electric and Westinghouse Designs
 - Observation of Korean Institute of Nuclear Safety (KINS) inspections at Crosby Valve and Westinghouse Newington

International Cooperation

- Potential to leverage international regulatory oversight of vendors
 - Understand international regulators' vendor oversight requirements and programs
 - Apply the lessons learned through implementation of the international regulators' vendor oversight activities
 - Identify differences with U.S. regulations and programs
 - Plan U.S. vendor inspections using insights from international regulators' observations and findings of vendor activities
 - Obtain construction experience insights

International Cooperation

- January 2008 – Technical exchange visit with KINS
- March 2008 – Observed three vendor inspections performed by Autorité de Sûreté Nucléaire (ASN)
 - Velan Value Co.– SR valves for nuclear industry
 - Cruesot Forge – Large component forgings (SGs, Rx Vessels, Piping)
 - AREVA Chalon Facility – Fabricators of (SGs, Rx Vessels, major components.
- May 2008 – Inspection at MHI with Japan Nuclear Energy Safety (JNES) Organization observation
- May 2008 – Conducted the first ever parallel inspection at Doosan with Korean Institute of Nuclear Safety (KINS) with ASN observation

International Cooperation

- During February 19-22, 2008, the MDEP meeting in Paris established the Multinational Vendor Inspection Programme (MNVIP) Working Group on Component Manufacturing Oversight
- On April 21-22, 2008, the MNVIP Working Group meeting discussed, among other things, the project plan, including the objectives, scope, roles and responsibilities, deliverables, and milestone schedule dates.

Commercial Grade Calibration Services

- NRC Letter to:
 - ACLASS Accreditation Services dated December 19, 2007 (ML073440472)
 - Laboratory Accreditation Bureau (L-A-B) dated April 22, 2008 (ML081140564)
 - International Accreditation Services (IAS) dated May 14, 2008 (ML081330253)
- Bases for NRC approval for accepting ACLASS, L-A-B, and IAS calibration services as an alternative method for qualifying suppliers in lieu of supplier audit, commercial-grade survey, or in-process surveillance for commercial-grade suppliers of calibrations services.
- Similar to Arizona Public Services safety evaluation report dated September 28, 2005, for NVLAP and A2LA. (ML052710224)

ASME NQA-1/NRC interactions

- NRR staff is in the initial stages of developing a revision to Regulatory Guide 1.28 for potential endorsement of the NQA-1-2008 Edition
- NQA-1 task group and NRC staff have resolved commercial grade dedication issues for the Part II, Subpart 2.14
- NQA-1 Task Group continues to address software QA issues for revision and inclusion in the NQA-1-2009 addenda

Generic Communications

- Information Notice 2007-40:
 - Informed addressees about recent NRC findings involving the inadequate implementation of 10 CFR Part 21 by vendors that supply basic components such as materials, equipment, components, or services to be used in NRC-licensed facilities
- Information Notice 2008-04:
 - Informed addressees of the potential for counterfeit parts that could enter their supply chains

Number of Nuclear Companies with ASME Certificates

Year	Components		Materials		Total
	Domestic	International	Domestic	International	
1982	386	49	95	54	584
2005	78	50	23	16	167

Reminder

- Licensee oversight of vendors
 - Licensees are responsible for ensuring that the vendors are fully knowledgeable of the regulatory requirements and technical specifications imposed by procurement documents

Questions?