NUPIC General Membership Meeting

June 2013

NRC Inspection Update

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U.S. NRC

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OUTLINE

- ✓2013 NRC Vendor Inspections
- ✓ Recent Inspection Results
- ✓ Update on New initiatives
- ✓ A plug for Safety Culture

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Recent NRC Vendor Inspections

- DRS Consolidated Controls – 1/2013
- Weir Valves & Controls USA Inc. – 2/2013*
- Westinghouse - 2/13*
- Stern Labs – 3/13
- Scientech – 3/13*
- Dresser-Masoneilan – 3/13
- Meggitt Safety Systems - 3/13*
- ABB Inc. – 4/13
- Flowserve – 4/13
- MPR Associates – NUPIC Observation 4/13
- Westinghouse – 4/13*
- AREVA – 4/13
- Western Zirconium – 5/13
- General Atomics ESI – 5/13*
- B&W Canada – 6/13
- Weed Instruments – 6/13

* AP-1000 testing, design, or fabrication

RELEASED REPORTS

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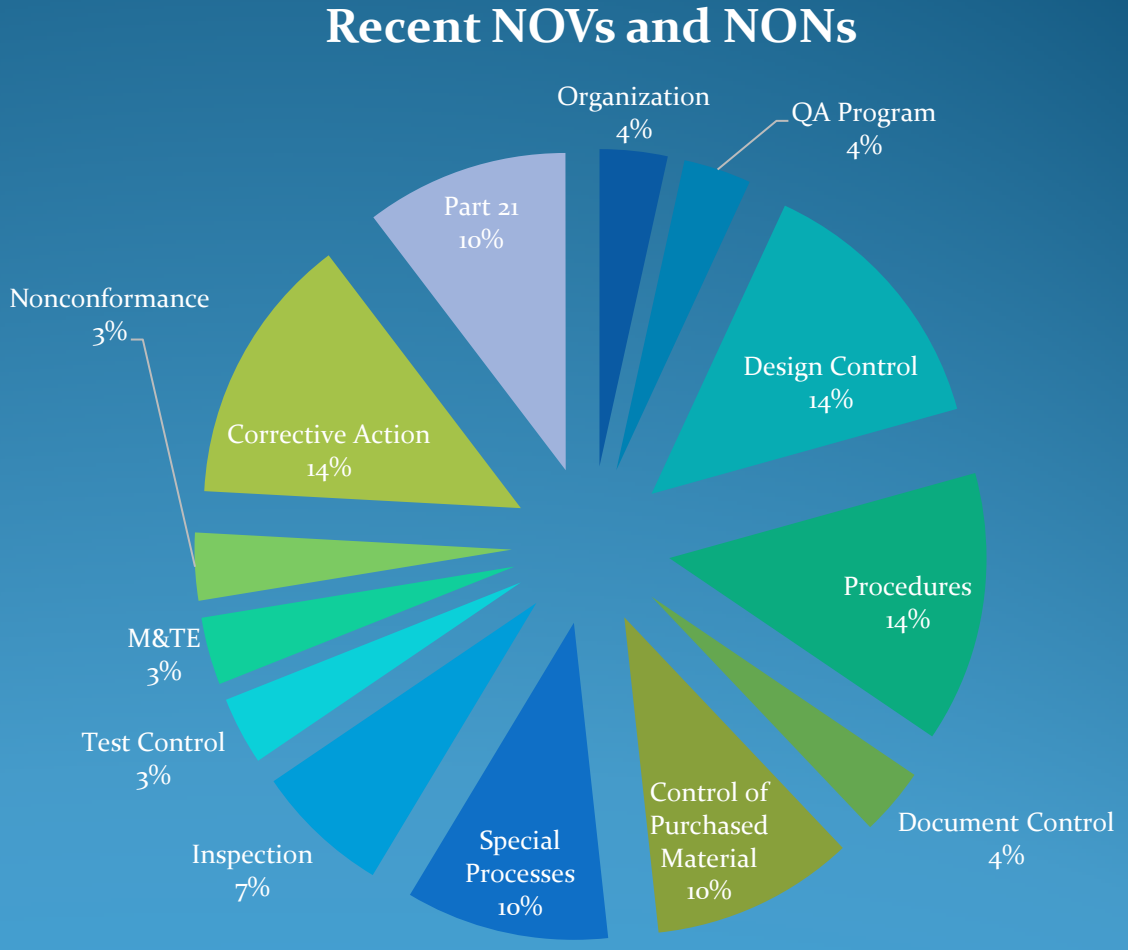
Recent Inspection Results



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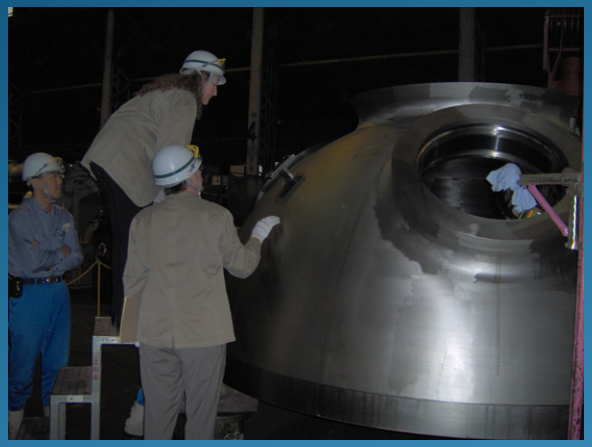
Recent Inspection Results



Most Common issues:

- Design Control (Dedication)
- Instruction, Procedures, Drawings
- Control of Purchased Material, Equipment, and Services (Supplier Control)
- Special Processes
- Corrective Actions
- Part 21

Summary:

NRC is performing more technically-focused inspections of vendors that evaluate the detailed design, procurement, fabrication, and testing of SR SSCs. Staff continues to identify issues associated with implementation of vendors QA programs.

Recent results indicate findings more broadly spread among QA Criteria and a more noticeable leveling of findings.

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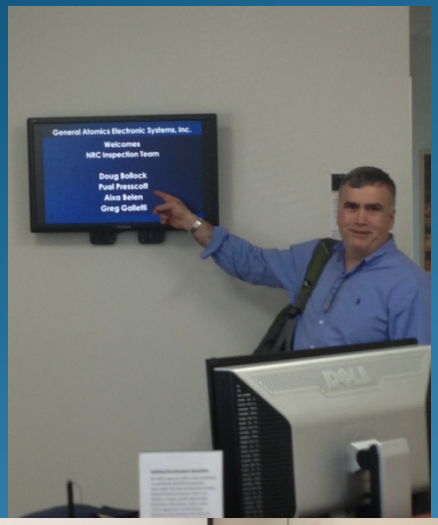
Recent Audit Results



NRC Observation of NUPIC Audits

April 2013 - NRC performed observation at MPR Associates* (supplies engineering services including design, software application and development, commercial grade dedication, and failure analysis.)

Results:

- Team performed all parts of audit using checklist
- Team was fully trained and qualified to conduct audit
- Supported findings with comprehensive objective evidence
- Findings clearly and thoroughly communicated to MPR

- One area for consideration would be to expand number of technical specialists to enhance technical rigor of evaluation.
- Also to ensure technical specialists have expertise in specific technical disciplines under review.

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* http://pbadupws.nrc.gov/docs/ML1310/ML13108A349.pdf

NEW Initiatives Update

More on the Procurement Initiative

NRC Vendor Inspections identify commercial grade dedication (CGD) issues at many of the vendors inspected

In FY 2012, 27 vendor inspections were conducted with 60 findings. 40% off those dealt with CGD issues

Proposed Inspection:

The inspection will be conducted following Inspection Procedure IP 43004 "Inspection of Commercial Grade Dedication Programs", which is currently undergoing a revision to integrate IP 38703

The inspection will be conducted by three to four inspectors for one week onsite.

Site Selection:

The Region would identify the reactor sites for CGD inspection based upon known or potential issues with CGD at those sites. Initially 1 – 2 inspections per region.

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NEW Initiatives Update

CGID and Software Dedication

EPRI 5652: (NP-5652 + TR 102260)

March 2013 – NRC participated in 5th CGID guidance revision technical advisory committee (TAG) meeting – Charlotte, NC

- Address areas needing additional content
- Perform initial review of working drafts
- Identify Key EPC issues for inclusion

Good discussion and table development comparing/contrasting design and manufacture under 10 CFR Part 50 Appendix B with commercial grade item dedication.

EPRI 1025243 - Software

July 2012 – Received NEI letter and submittal

February 2013 – NRC issued 6 RAIs

May 2013 – Met with EPRI to discuss status

Current – NRC developing Draft RG 1305 to endorse guideline should be completed in 2013

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NEW Initiatives Update

Regulatory Guidance Activities

Draft RG-1300, "Quality Assurance Program Requirements (Operations)"

Endorses 2012 edition of ANSI/ANS-3.2-2012, "Managerial, Administrative, and Quality Assurance Controls for Operational Phase of Nuclear Power Plants," will be issued in final within a few weeks. DG-1300 is the proposed Revision 3 to Regulatory Guide 1.33, dated February 1978.

The ANS-3.2 standard has changed its format to more closely align with the latest version of NQA-1 and to reduce duplicative requirements

RG-1.28, Revision 4, July 2010

NRC recently endorsed American Society of Mechanical Engineers NQA-1-2008/2009 Addenda), "Quality Assurance Requirements for Nuclear Facility Applications," via RG 1.28 in July 2010.

A clear delineation of quality assurance requirements is now available for the new generation of plants as well as for consideration of existing licensees who may want to migrate to a consistent set of requirements for their fleet of rectors within their company.

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NEW Initiatives Update

Communication Outreach

http://nrcweb.nrc.gov:400/reactors/new-reactors/oversight/quality-assurance/vendor-insp.html.

2012 Annual Vendor Newsletter is now available on our public website at the below link. Topics of interest include news on the 10 CFR Part 21 rulemaking activities, Counterfeit, Fraudulent, and Suspect Items (CFSI), commercially procured software dedication, and vendor inspection finding data.

http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/qual-assure-faqs.html

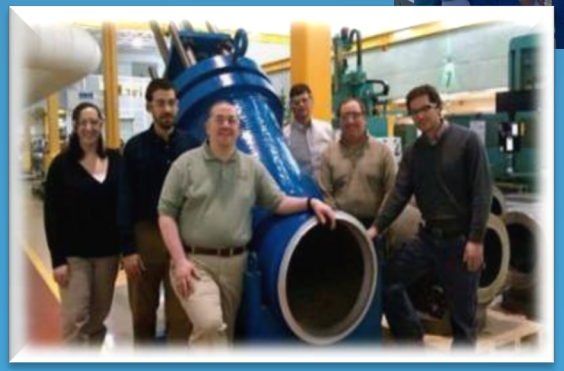
The Frequently Asked Questions FAQ page addresses Quality Assurance for New Reactors and currently has three main categories: 10 CFR Part 21 FAQs, Commercial Grade Dedication FAQs, and Enforcement FAQs.

http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/nonconformances-violations.html

This page is to serve as a categorization tool and provides a list of all applicable QA Inspections for New Reactor Licensing and Vendor QA Inspection reports that have either a Notice of Nonconformance (NON) or Notice of Violation (NOV) within a specific criterion of 10 CFR 50 Appendix B or 10 CFR Part 21 related issue.

http://pbadupws.nrc.gov/docs/ML1200/ML12006A008.pdf

This link describes the vendor inspection program (VIP).



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A Plug for 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.(1)

Recent issuance of Chilling Effect Letter and proposed Imposition of Civil Penalty to CB&I (Formerly Shaw Power Group) for two violations of 10 CFR 52.5 "Employee Protection."

Based on the conclusion that portions of the SMS workforce, especially employees with nuclear and quality control backgrounds have the perception that they were not free to raise safety concerns using all available avenues. (2)

(1) http://www.nrc.gov/about-nrc/regulatory/enforcement/safety-culture.html
(2) ADAMs Accession number - ML13092A077

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Questions

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