NUCLEAR OVERSIGHT CONFERENCE

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Vendor Inspection Program, Cyber Security, Fukushima, and Industry Trends

Kerri Kavanagh

Office of New Reactors

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Topics for Discussion

1. The NRC Vendor Inspection Program (VIP)
2. Cyber security and milestone 8
3. Post Fukushima activities on licensing basis
4. Vendor inspections trends
5. Reactor Oversight Program (ROP) trends

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Vendor Inspection Program (VIP)

- 2012 NRC creates Vendor Inspection Center of Expertise (COE) to provide oversight of vendors for new and operating reactors
  - Includes COE for Quality Assurance

- Three inspection branches
  - Mechanical Vendor Inspection Branch
  - Electrical Vendor Inspection Branch
  - Quality Assurance Vendor Inspection Branch

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Vendor Inspection Program (VIP)

- VIP publicly available on NRC QA website
  - http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-insp.html
- Types of inspections
  - Component manufacturing, design certification qualification testing, applicant QA implementation, equipment qualification testing, design services

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Vendor Identification

- Current NRC Sources of Vendor Information
  - Reporting systems – 10 CFR Part 21, 50.72, 50.73
  - Industry and standards organizations
  - Communication with licensees, applicants, and engineering, procurement, and construction (EPC) contractors
  - Allegations
  - International Sources (MDEP)
- Initiatives
  - Regulatory Information Summary (RIS) requesting voluntary identification (RIS 2014-07)
  - NRC public web site
  - NRC internal database

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NRC oversight of Cyber Security

The VIP verifies that reactor applicants and licensees are fulfilling their regulatory obligations with respect to providing effective oversight of the supply chain.

- NRO is currently implementing actions to assess cyber security requirements as they are passed down to vendors

- Routine inspections verify that vendors supplying basic components in accordance with the requirements in Appendix B to 10 CFR Part 50 provide a product meeting the technical and quality requirements in the procurement documents.

  - IP 43002, “Routine Inspections of Nuclear Vendors,” specifically lists implementation of cyber security requirements

    - NRC Inspection Report 99900404/2014-201 details the NRC inspectors review of the implementation of the executed Phase 1 requirements for the AP1000 standard Plan Cyber Security for Vogtle Units 3 and 4 by Westinghouse (ML14058A995)

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NRC oversight of Cyber Security

- Reactive inspections are conducted in response to information indicating the possibility that vendors are not meeting NRC requirements.
  - One of the criteria used to determine the need for a reactive inspection is if a major deficiency in the design, function, or traceability of a critical digital asset is identified

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Cyber Security Milestone 8

Milestone 8 is the full implementation of the cyber security plan

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NRC Senior Management Trip to Fukushima

FUKUSHIMA REFLECTIONS VIDEO

http://www.youtube.com/watch?v=W9OjCCS24kc

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Post Fukushima activities on licensing basis

- **Licensee Walkdown Reports**
  - Approximately 90% of licensees entered issues into their Corrective Actions Program
  - Issues are being addressed through licensees' Corrective Actions Program and NRC's Reactor Oversight Process
  - Level of detail in some licensee reports make it difficult for the staff to fully understand the plant's flood protection features
  - Several licensees acknowledged that their flood protection maintenance and monitoring programs were ineffective

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Post Fukushima activities on licensing basis

- **NRC Staff Observations from Walkdowns**
  - Common issues identified include:
    - Inadequate procedures
    - Flood protection features that may not perform as planned
    - Degraded or missing seals
  - Flood protection enhancements include:
    - Procedural improvements
    - Improve or develop preventative maintenance programs

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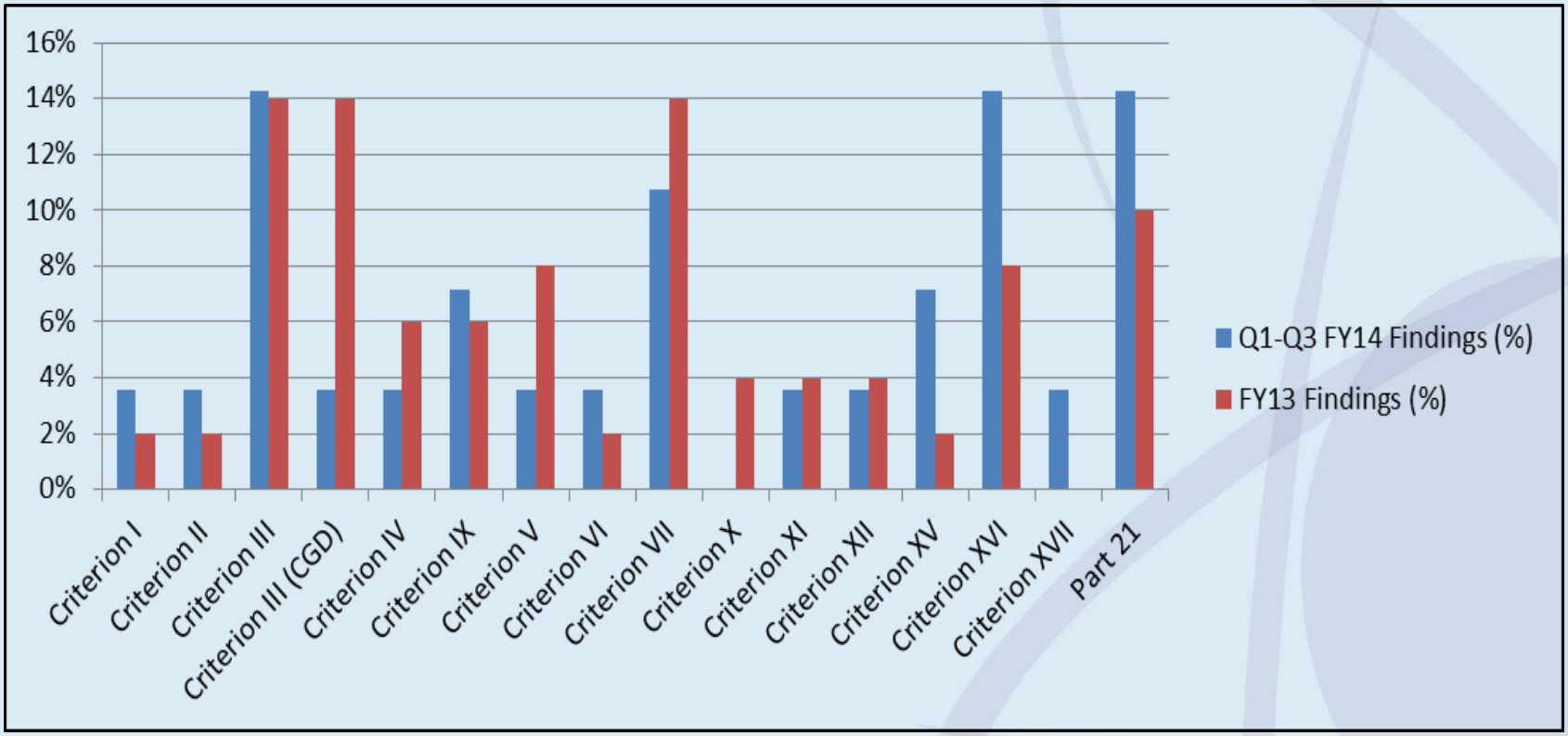
Vendor Inspections Trends

Inspection trends for FY2013 to the 3rd Quarter of FY 2014.



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NRC Vendor Inspections

- Wyle Laboratory– 1/2014
- Rosemount Nuclear Instruments – 1/2014
- Westinghouse - 3/2014
- Enersys– 3/2014
- Chicago Bridge & Iron – 3/2014
- Pentair Valves and Controls - 3/2014
- Westinghouse – 4/2014
- Wyle Laboratory – 4/2014
- United Controls International – 4/2014
- C&D Technologies - 4/2014
- Specialty Maintenance and Construction, Inc. – 4/2014
- Steris Isomedix Services – 4/2014
- Carolina Energy Solutions – 5/2014*
- RSCC Wire & Cable LLC– 5/2014*
- Curtis-Wright EMD – 6/2014*
- Doosan – 7/2014*

* Inspection report not issued yet.

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ROP Trends

SECY-14-0042, “FISCAL YEAR 2013 RESULTS OF THE INDUSTRY TRENDS PROGRAM FOR OPERATING POWER REACTORS,” dated April 10, 2014.

- The NRC Industry Trends Program (ITP) monitors industry safety performance to identify and address any statistically significant adverse industry trends available data

- A statistically significant adverse trend exists if the slope of the regression line fitted to the long-term indicator data has a positive value and the fit of the regression line is statistically significant .

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ROP Trends

FY 2013 LONG-TERM INDUSTRY TRENDS:

- The staff did not identify any statistically significant adverse trends in industry safety performance.

FY 2013 SHORT-TERM INDUSTRY PERFORMANCE:

- Short-term FY 2013 data did not reveal any emerging trends that warranted additional analysis or significant adjustments to the nuclear reactor safety inspection or licensing programs

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ROP Trends

- Further information can be found in the following SECY-14-0042, “Enclosures” sections:
  - Fiscal Year 2013 Long-Term Industry Trend Results
  - Fiscal Year 2013 Short-Term Industry Performance
  - Summary of Baseline Risk Index for Initiating Events: Annual Graphs through Fiscal Year 2013
  - Staff’s Review of the Industry Trends Program

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Questions

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