

NRC Regulatory Update

Nuclear Oversight Conference Meeting

St. Petersburg, FL

January 29, 2020



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An Introduction

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- One year ago
 - ▣ Two QA/vendor inspection branches in the Office of New Reactors (NRO) (QVIB 1 and 2)
 - ▣ 15 personnel
- Today
 - ▣ One QA/vendor inspection branch in the Office of Nuclear Reactor Regulation (NRR) (IQVB)
 - ▣ 15 personnel – a few new faces
 - ▣ Same mission and focus



IQVB Current Initiatives/Focus

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- 7th NRC Vendor Oversight Workshop, June 18, 2020
- NRC Regulatory Information Conference (RIC) Session on Worldwide Uses of Equipment Qualification and Commercial-Grade Dedication, March 11, 2020
- Safety Conscience Work Environment in the Nuclear Supply Chain
- Safeguard Information Program inspections
- Commercial Calibration and Testing Services
- Monitoring of Counterfeit, Fraudulent, and Suspect Items (CFSI)
- Licensing Activities and Inspections
- Part 21 and Operational Experience



2020 Vendor Oversight Workshop

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- ❑ On June 18, 2020, the NRC will hold its seventh Vendor Oversight Workshop in conjunction with annual Nuclear Procurement Issues Corporation (NUPIC) Vendor Conference in Baltimore, Maryland
- ❑ The NRC anticipates the workshop will have several hundred participant's both from domestic and international nuclear utilities and vendors
- ❑ Topics of the workshop are being developed



Safety Conscious Work Environment (SCWE) and NRC Vendor Inspection Program

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- NRC is enhancing its Inspection Manual Chapter (IMC), Inspection Procedures and staff guidance documents to include guidance for SCWE assessments/observations
 - To bring the Vendor Inspection Program (VIP) in compliance with the current NRR SCWE mindset for operating reactors
 - Provides the NRC a measure of the safety culture health of the nuclear supply chain
 - Previously, SCWE assessments/observations have been performed at vendor facilities, but no documented guidance or expectations existed for IQVB staff
- Revising IMC 0617, “Quality Assurance and Vendor Inspection Reports,” to include guidance for documenting SCWE observations/assessments of a vendor’s/applicant’s SCWE program
 - The SCWE guidance does not change past work practice and is at the discretion of the vendor inspection Branch Chief



Safeguards Information (SGI) Program Inspections of Design Certificate Applicants/Vendors

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- Title 10 Code of Federal Regulations (CFR) Part 73.21 (General) and Part 73.22 (Specific)
 - ▣ 2007 Order EA-07-231: Issued to individual vendors/applicants
 - ▣ 2008 rulemaking: Additional changes in later years
- Currently, NRR/IQVB conducts inspections of vendors or applicants programs for protecting SGI
 - ▣ 3 year periodicity of SGI inspections
- Inspection Procedure 81811, “Protection of Safeguards Information by Design Certification Applicants and Vendors”
- SGI inspections are typically performed as part of a routine NRC inspection



Provisional Recognition of ISO/IEC No.17025:2017

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- ❑ On October 1, 2018, the Nuclear Energy Institute (NEI) requested the NRC to recognize the 2017 Edition of the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 17025, “General Requirements for the Competence of Testing and Calibration Laboratories,” for use during 3-year transition period that is set to expire on November 30, 2020
- ❑ NRC response to NEI concluded that ISO/IEC 17025:2017 maintains the same technical and quality requirements as ISO/IEC 17025:2015. This was based on an independent review of ISO/IEC 17025:2017, and a gap analysis done by both the NUPIC and NEI
- ❑ The NRC staff confirmed that the applicable critical characteristics for commercial calibration and testing services continue to be properly controlled and verified in ISO/IEC 17025:2017, as part of the ILAC accreditation process
- ❑ NRC staff is anticipating that NEI will submit for NRC staff review, a revision of NEI 14-05A for the staff’s endorsement of ISO/IEC 17025:2017



Monitoring of Counterfeit, Fraudulent, Suspect Item (CFSI) Issues

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- ❑ Remain proactive and ahead of events or threats
- ❑ NRC is engaged with other Government agencies to gain knowledge and experience
- ❑ NRC has a formal agency-wide strategy to monitor, screen and evaluate CFSI
- ❑ NRC's Operating Experience Program updated to include CFSI as a Technical Review Group
- ❑ Generic communications related to CFSI include:
 - **Information Notice (IN) 2008-04**, "Counterfeit Parts Supplied to Nuclear Power Plants"
 - **IN 2012-22**, "Counterfeit, Fraudulent, Suspect Items (CFSI) Training Offerings"
 - **IN 2013-02**, "Issues Potentially Affecting Nuclear Facility Fire Safety"
 - **IN 2013-15**, "Willful Misconduct/Record Falsification and Nuclear Safety Culture"
 - **IN 2018-11**, "Kobe Steel Quality Assurance Record Falsification"
 - **Regulatory Issue Summary 2015-08**, "Oversight of Counterfeit, Fraudulent, and Suspect Items in the Nuclear Industry"



Licensing and Inspections

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- ❑ IQVB conducts licensing reviews of licensees, applicants, and some vendors quality assurance programs
 - ❑ Four operating reactor QAPD changes under review
 - ❑ Five advanced reactors/moly-99 QAPD under review
 - ❑ One construction permit transfer QAPD under review
- ❑ IQVB conducts 20 vendor inspections a fiscal year
 - ❑ Plan on observing two NUPIC audits
 - ❑ Usually observe one foreign Regulator vendor inspection as part of MDEP VICWG
 - ❑ Majority of inspections will be related to operating reactor suppliers
 - ❑ Issued yearly Vendor Times newsletter (ML19324F291)
- ❑ IQVB participates in NQA-1 and ASME Section III standards development meetings – supports endorsement by NRC



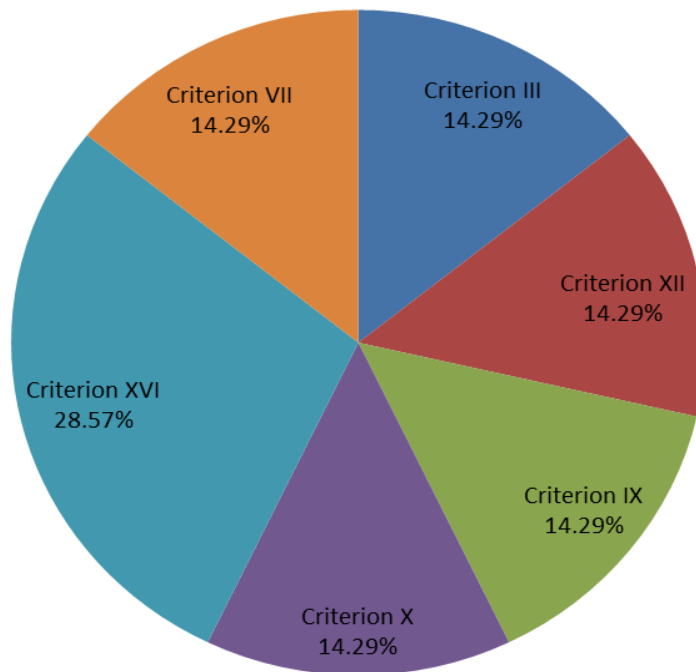
Vendor Inspection Findings FY2019

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FY2019 - 7 NONs issued

FY2019 – Issues of Significance

FY 2019 NOVs and NONs



- HydroAire
 - Third party oversight
- L&S Machine
 - Engineering evaluation by customer
- Curtiss Wright Enertech
 - Inadequate audits/oversight
- Fisher Controls
 - Environmental qualification of pressure transducers



Part 21 and operational experience (OpE)

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- ❑ Benefits of evaluating OpE reported to the NRC
- ❑ 10 CFR Part 21 was designed to implement Section 206 of the Energy Reorganization Act of 1974
 - ❑ One of a few regulations with reporting requirements
- ❑ Recognition of OpE as a potential contributor to safety was identified as a TMI Action Item:
 - ❑ “Provide administrative procedures for evaluating operating, design and construction experience and for ensuring that applicable important to industry experiences will be provided in a timely manner to those designing and constructing the plant.” (I.C.5)
- ❑ OpE is tracked and trended by the NRC staff
 - ❑ Focus on highly safety significant items or services
 - ❑ Easily accessible at <https://www.nrc.gov/reading-rm/doc-collections/event-status/part21/>



For More Information...

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- The Quality Assurance for New Reactors Website offers a variety of information including:

- Vendor Inspection Program (VIP) Plan

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-insp/vendor-insp-prog-plan.html>

- Vendor Quality Assurance (QA) Inspection Reports for New Reactors

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-insp/insp-reports.html>

- Quality Assurance (QA) Inspections for New Reactor Licensing

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

