



NRC UPDATE

June 2019

NUPIC General Membership Meeting
and Vendor Meeting
Jacksonville, Florida



Taylor Lamb and Greg Galletti

Quality Vendor Inspection Branch, Office of Nuclear Reactor Regulation



Topics

2

- Vendor Inspection Findings and Planning
 - ▣ Creusot Forge
- NUPIC Observations
- ILAC Update
- Environmental Qualification Inspection Items



NRC Vendor Inspection Findings

3



- 4 inspections were performed in 1st quarter FY19
 - 2 Notices of Nonconformance were issued:
 - 1 Appendix B, Criterion IX, “Control of Special Processes”
 - 1 Appendix B, Criterion X, “Inspection”
- 7 inspections were performed in 2nd quarter FY19
 - 1 Notice of Nonconformance was issued:
 - 1 Appendix B, Criterion XI, “Test Control”
- 5 inspections were performed in 3rd quarter FY19, and 1 additional planned



Vendor Inspection Planning

4

- Decrease in overall inspections for FY19 to approximately 20
 - ▣ Includes QA Implementation and Vendor Inspections
- Two NUPIC Observations (not included in total)
 - ▣ Weir Valves
 - ▣ ILAC Observation





Creusot Forge Inspection

5

- Follow-up on issues identified during the Multinational Design Evaluation Programme (MDEP) inspection of Creusot Forge in 2016
- Two inspections were performed:
 - ▣ AREVA NP ([ML19116A264](#))
 - ▣ Framatome ([ML19116A256](#))
- Autorité de Sûreté Nucléaire (ASN) observed
 - ▣ ASN determined that the corrective actions by Framatome related to the quality assurance program and the manufacturing process have been adequately implemented.



ILAC Update



6

- In a letter dated October 1, 2018, NEI/NUPIC requested NRC's endorsement of the recently published 2017 version of ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories."
- NRC staff issued a provisional endorsement on April 16, 2019 ([ML19056A451](#))
- NEI/NUPIC plans to subsequently submit a revision to NEI 14-05A in June 2019 for staff evaluation.



Future EQ Inspection Items

7

- Inspection focus for Test Laboratories/Vendors Performing Qualification Activities:
 - Basis for chosen activation energy used in thermal aging calculations
 - Identification of all non-metallic materials whose degradation could impact safety function
 - References for all activation energies assigned to non-metallic materials
 - Identification of specific material property associated with chosen activation energy
 - Basis for test sample selection and justification that it envelopes qualification family
 - All test anomalies fully evaluated and inaccuracies accounted for
 - Physical set-up mimics installed condition



Future EQ Inspection Items

8

- Inspection focus for suppliers of EQ replacement parts:
 - For commercially dedicated EQ parts, ensure sufficient verification of material composition and properties
 - FTIR or similar testing alone may not be sufficient to detect changes in manufacturing methods or compound variations
 - Need to consider factors such as:
 - Time since original qualification
 - Source of material/component
 - Sensitivity of component to slight material changes



For More Information...

9

- 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>
 - The Vendor Times

ADAMS Accession No. ML18212A422



