

NRC Update

NUPIC General Membership Meeting

June 12-13, 2023

Denver, CO



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Office of Nuclear Reactor Regulation



Recent & Upcoming NRC Inspections

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Recent:

- ☐ Valcor
- ☐ Prysmian Group (General Cable)
- ☐ TN Americas (NUPIC Observation)
- ☐ Japanese Steel Works (WGSUP)
- ☐ Nutherm International
- ☐ Ultra Energy
- ☐ Global Nuclear Fuels – Americas
- ☐ MPR Associates
- ☐ Mistras Services
- ☐ Curtiss-Wright, QualTech NP
- ☐ Fluke Biomedical Company

Upcoming:

- ☐ ANSYS
- ☐ Fluor
- ☐ Velan

NRC Vendor Inspections & Findings

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□ RESULTS:

- Criterion XVI, Corrective Action – Target Rock
 - Prompt Identification and Correction
- Criterion VIII, Identification and Control of Material, Parts, & Components – Reuter-Stokes
 - Use of incorrect material in safety related components



NRC Inspection Observations

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□ Sampling Plan Documentation:

- Multiple vendors have been observed to not provide adequate justification for technical bases of sampling plans, specifically related to traceability and sample size.
- EPRI 3002002982, Section D.2.9 – “Basis for selection of sampling plans. When sampling is used, document the sampling plan selected for each critical characteristic and the basis/factors considered when selecting the sampling plan.”
- EPRI TR-017218-R1, Section 1.4.5 – “The commercial grade item acceptance sampling process and the bases for sampling plan selection and application should be adequately documented. **Documentation should address such factors as lot formation, complexity of the item, adequacy of supplier control as appropriate, safety function, test methodology, product performance, acceptance history of a supplier, item performance history, and other qualitative factors.**”



NRC Inspection Observations

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- Management of Corrective Actions:
 - 10 CFR 50 Appendix B, Criterion 16 – “Corrective Action”
 - “Measures shall be established to assure that conditions adverse to quality, ... are promptly identified and corrected.”
 - NQA-1-2015, Requirement 16:
 - “Conditions adverse to quality shall be identified promptly and corrected as soon as practicable.”
 - SUBPART 3.1-16.1 does not recommend a timeframe
 - NRC vendor inspectors have observed vendors self-imposing a due date of 30 days.
 - Some vendors allow for an extension.
 - There have been observations of vendors not achieving the 30 day self-imposed limit.



Regulatory Guide (RG) 1.28

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- Draft Guide (DG) 1403 proposes specific changes for revision 6.
 - Published on April 24, 2023
 - Public comment period closed on June 2, 2023
 - IQVB will review and address public comment prior to releasing revision 6.



Commercial-Grade Dedication Inspections at Licensees

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- IQVB Staff worked with NRR Inspection program leads and regional inspection teams to develop an inspection of licensee Commercial Grade Dedication programs.
- Seven inspections have been performed against this inspection procedure.
 - Currently reviewing complete inspections for lessons learned.
 - No more than minor findings identified to date.
 - Common themes observed:
 - Control of material once it leaves the warehouse
 - Shelf life of parts in the warehouse
 - Adherence to established procedures



ASME Code Case N-883

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- Case N-883 - Construction of Items Prior to the Establishment of a Section III, Division 1 Owner
 - Approved in Jan. 2018
 - Allows for construction of items prior to the establishment of an owner by certificate holders, under specific conditions.
- RG 1.84 – Design, Fabrication, and Materials Code Case Acceptability, ASME Section III
 - Allows for Code Case N-883 to be used only by holders of Construction Permits, Operating Licenses, or Combined Operating License.
- The NRC staff is continuing development of regulatory proposals to consider submissions similar to this in the future.



EPA Rulemaking on DecaBDE

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- DecaBDE used as a fire retardant additive in various products, specifically in nuclear industry cabling.
- U.S. EPA Rulemaking bans Manufacture, Processing, & Distribution
 - EPA began initial rulemaking and communications in 2010
 - Manufacture was banned in Jan. 2021
 - Processing and distribution for cable industry was banned in Jan. 2023
- Impact to Nuclear Industry – For items containing DecaBDE
 - Processing is prohibited, with the exception of processing for disposal.
 - Distribution may be allowed in some specific cases, based on EPA Rules.
 - Import or export has significant limitation, based on EPA Rules.
- Consent Agreement & Final Order (CAFO) and Enforcement Statement
 - On May 1, EPA signed a CAFO with RSCC to allow for their continued use of DecaBDE in cabling while qualifying a replacement.
 - On May 2, EPA released an Enforcement Statement addressing the use of cabling containing DecaBDE during qualification of replacements.



2nd Town Hall on Vendor Oversight

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- Scheduled for June 21, 2022
- Will be held virtually from 1:00 to 4:00 (Eastern Time)
- Registration is Open
 - <https://www.nrc.gov/reactors/new-reactors/how-we-regulate/oversight/quality-assurance/town-hall-meetings.html>
- Planned topics –
 - DecaBDE: Update and Follow-up Activities
 - Part 21 Reporting
 - Sample Sizes in Commercial Grade Dedication and Other Issues Identified during NRC Inspections
 - Two dedicated Question & Answer Sessions



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