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UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

NRC Liaison Report & Updates
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Disclaimer

- This presentation was prepared by staff of the U.S. Nuclear Regulatory Commission (NRC). It may present information that does not currently represent an agreed upon NRC staff position. NRC has neither approved nor disapproved the technical content.



Topic for Discussion

- Title 10 of the Code of Federal Regulations (10 CFR) Section 50.55a Rulemaking Updates
- Regulatory Guide (RG) Update – OM Code Case Acceptability
- Event Notice
- Thirteenth ASME/NRC Pump & Valve Symposium
- Conclusion



10 CFR 50.55a Rulemaking Updates

- Recently new ASME Code Rulemaking issued on July 18, 2017 (Federal Register, Vol. 82, No. 136, page 32934-32986, dated July 18, 2017). This final rule is effective on August 17, 2017.
- Rulemaking incorporates by Reference the 2009 Edition through 2013 Edition of the American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) Code , and the 2009 Addenda through 2013 Edition of ASME Boiler and Pressure Vessel (B&PV) Code Section XI.



10 CFR 50.55a Rulemaking Updates

- Last ASME Code Rulemaking issued on June 21, 2011 (Federal Register, Vol. 76, No. 119, page 36232-36279, dated June 21, 2011).
- Rulemaking incorporates by Reference the 2004 Edition with 2005 and 2006 Addenda of the American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) Code , and the 2005 Addenda through 2008a Edition of ASME Boiler and Pressure Vessel (B&PV) Code Section XI.
- For current 10 CFR 50.55a, see www.ecfr.gov



10 CFR 50.55a Rulemaking Updates (cont.)

- The scope of the next proposed rulemaking to amend 10 CFR 50.55a is currently planned to include 2015 Edition to the ASME BPV Code section III, Division 1, and Section XI, Division 1 and ASME OM Code, Division 1 with conditions, and 2017 Edition to the ASME OM Code, Division 1 with conditions.



10 CFR 50.55a Rulemaking Updates (cont.)

- Specific items of interest in the proposed next rulemaking related to the ASME OM Code Edition 2017 being considered:
 - To add NRC IST Plan submittal and reporting requirements consistent with current Edition of the ASME OM Code.
 - Revise 10 CFR 50.55a(f)(4)(i) and (ii) and (g)(4)(i) and (ii) to relax the time scheduled for complying with the latest Edition and Addenda of the ASME OM or BP&V Codes for IST and ISI Programs, respectively, from 12 months to 18 months before the applicable milestones in these paragraphs.



10 CFR 50.55a Rulemaking Updates (cont.)

- This proposed rulemaking is currently scheduled to be published for public comments in the Fall 2017, with a 75 day public comment period. The final rulemaking package is currently scheduled to be published in late 2018.



10 CFR 50.55a Rulemaking Updates – OM Code Case Applicability

- Final Reg. Guide Rulemaking & Reg. Guides 1.192, Rev. 1 “O&M Code Case Acceptability, ASME OM Code” and RG 1.147, Rev. 17, “Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1” are issued and published in Federal Register in November 2014 (Federal Register, Vol. 76, No. 214, Pages 65776-65814, dated November 5, 2014). Effective date is December 5, 2014.
- Revision 1 of RG 1.192, and Revision 17 of RG 1.147 address the acceptability of the Code Cases published in the 2003 Addenda through 2006 addenda of the ASME OM Code and the Section XI Code Cases listed in Supplement 1 through 10 to the 2007 Edition of the ASME B&PV Code. The current regulations in 10 CFR 50.55a incorporate by reference these specific revisions to RGs.



10 CFR 50.55a Rulemaking Updates – OM Code Case Applicability (cont.)

- The NRC staff has completed a review of the new and revised Code Cases published in the 2009 Edition, and 2012 Edition of the ASME OM Code. The proposed rulemaking and RGs for these Code Cases was published for public comments in the Federal Register (81 FR 10780) on March 2, 2016.
- The public comment period closed on May 16, 2016 and NRC received 7 comments. Each Code Case in RG 1.192 will be identified by the number assigned by the OM Code and the applicable Edition and Addendum of the OM Code with which it is first published.



10 CFR 50.55a Rulemaking Updates – OM Code Case Applicability (cont.)

- The NRC staff has completed a review of the public comments on the proposed RG rulemaking and is preparing the final rule for issuance. The final RG rulemaking is currently scheduled to be published in the end of 2017.



Event Notice # 51788

- Findings:
 - During a routine refueling outage activities in October 2015 at Peach Bottom Power Station, it was discovered that 9 out of 14 hydraulic snubbers had no fluid in their reservoirs.
 - Peach Bottom installed these new hydraulic snubbers during recent Extended Power Uprates (EPU) on the modified Main Steam System piping.



Event Notice # 51788 (cont.)

- Evaluation of Findings by Peach Bottom:
 - The licensee determined that the cause of the hydraulic fluid leak was due to premature aging of the reservoir piston seal due to vibration induced friction heat.
 - Licensee performed laboratory testing of the seal material which revealed that a material substitution of different grade of Ethylene Propylene (EP) was used instead of previously vendor approved EP.

Event Notice # 51788 (cont.)

- Evaluation by Snubber Vendor:
 - Snubbers' vendor confirmed that a seal material substitute was made by the seals' vendor.
 - Vendor performed additional qualification testing of substitute seal material and found acceptable.
 - In a follow-up qualification testing, vendor determined that a specific defect is not due to seal material change by seal vendor.

Event Notice # 51788 (cont.)

- Conclusion of Findings:
 - This Event Notice concludes that during EPU, the licensees should use the guidelines provided in RG 1.20, “Comprehensive Vibration Assessment Program for Reactor Internals During Preoperational and Initial Startup Testing,” to avoid the snubber failures due to vibration.
 - For more details see Event Notice 51788 dated March 14, 2016 related to 10 CFR Part 21- Hydraulic Snubber Seal Material Deviation Report (ADAMS No. ML16076A262).
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Thirteenth ASME/NRC Pump & Valve Symposium which included Snubber

- The ASME and the NRC jointly sponsored the thirteenth Pump & Valve Symposium July 17-19, 2017, In Silver Spring, Maryland, at the Double Tree by Hilton Hotel Washington DC – Silver Spring
- Following Snubber papers were presented during snubbers track:
 1. Snubber Program Transition from ISI Code to IST Code, ISTD
 2. Delivering the Nuclear Promise in Snubber ISI and IST Through Effective Use of the O&M ISTD Code
 3. Inservice Examination and Testing Issues of Snubbers at Nuclear Power Plants
- The Proceedings of the thirteenth ASM/NRC Pump & Valve Symposium will be available as NUREG/CP-0152, Volume 10 at the NRC public website.

Conclusions

- Licensees who believe that some of the items discussed are applicable to their facilities may wish to review their current snubber program and modify their program as appropriate.
- Use of RG 1.20, “Comprehensive Vibration Assessment Program for Reactor Internals During Preoperational and Initial Startup Testing,” may be of value during plants EPU.



Questions?

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