

STATUS OF NRC ACTIVITIES OF POTENTIAL INTEREST TO OM MAIN COMMITTEE

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**ASME OM Code Committee Meeting on July 22-24
At Warwick, RI**

10 CFR 50.55a Rulemaking

Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a was amended by the last rulemaking, to incorporate by reference the 2005 and 2006 Addenda of the American Society of Mechanical Engineers (ASME) Operation and Maintenance (OM) Code, the 2005 Addenda through 2008 Addenda of ASME Boiler and Pressure Vessel (B&PV) Code Section XI, and 2005 Addenda through 2008 Addenda of the ASME B&PV Code Section III.

In the spring of 2011, the Nuclear Regulatory Commission (NRC) started the next rulemaking to incorporate the 2009 Edition of the ASME OM Code with the 2011 Addenda and the 2009 Addenda and 2010 Edition with 2011 Addenda of ASME B&PV Code, Sections III and XI, into 10 CFR 50.55a. The NRC decided to delay this rulemaking order to include the 2012 Edition of the ASME OM Code and the 2013 Edition of the ASME B&PV Code. This proposed rulemaking is tentatively scheduled to be published for public comment in August 2015 and the final rule is tentatively scheduled to be issued in August 2016. The NRC staff is planning to propose a condition in this rulemaking to endorse the use of Code Case OMN-20, "Inservice Test Frequency," without requiring NRC approval.

Licensees are reminded that when currently applying to use Code Case OMN-20 as an alternative under 10 CFR 50.55a, it is important to include in their request other approved alternatives that specify test intervals. For example, the use of ASME OM Code Case OMN-1 "Alternative Rules for Preservice and Inservice Testing of Active Electric Motor Operated Valve Assemblies in Light-Water Reactor Power Plants."

Regulatory Guide (RG) Update – OM Code Case Acceptability

The proposed rulemaking and RGs (Revision 1 of RG 1.192, Revision 36 of RG 1.84, and Revision 17 of RG 1.147) for the code cases published in the 2003 Addenda through the 2006 Addenda of the ASME OM Code and the Section III and XI code cases listed in Supplements 1 through 10 to the 2007 B&PV Code were published for public comment in the *Federal Register* on June 29, 2013, with a public comment period until September 9, 2013. This proposed rulemaking contained revisions to the structure and numbering of 10 CFR 50.55a, as required by the Office of the *Federal Register* and also proposed paragraph and subparagraph headings. The final rulemaking was published on November 5, 2014 and was effective on December 5, 2014.

The NRC staff has completed a review of the new and revised code cases published in the 2009 Edition, 2011 Addenda, and 2012 Edition of the ASME OM Code. The proposed rulemaking and RGs for these code cases is currently scheduled to be published for public comment in the Fall of 2015. Each code case in RG 1.192 will be identified by the number assigned by the OM Code and the applicable edition or addendum of the OM Code with which it is first published.

Temporary Instruction (TI) Inspection Procedure (TI 2515/189) for Snubbers

NRC expects that licensees not meeting the 10 CFR 50.55a regulations should have completed all actions noted in Regulatory Issue Summary (RIS) 2010-06 and also described in Enforcement Guidance Memorandum (EGM) 2010-01, by June 1, 2012.

As of December 31, 2014, NRC Regional inspectors completed the review of the snubber programs of the selected nuclear power plants as specified in TI Procedure (TI 2515/189). The NRC regions selected eight plants, with two plants from each region, except for Region II. Region II selected two additional nuclear power plants for the TI inspection. NRC observations are:

- Four selected plants clearly meet the 10 CFR 50.55a requirements.
- Five selected plants do not have clear information as to which Code (ASME OM Code or ASME/ANSI OM Part 4 while using ASME B&PV Code, Section XI) they are using. Licensees and NRC inspectors did not have a clear understating of the differences between ASME OM Code and ASME B&PV Code, Section XI (ASME/ANSI OM Part 4).
- One selected plant is using their Technical Specifications in lieu of the ASME OM Code requirements without NRC approval. The licensee created a corrective action as defined in RIS 2010-06 and EGM 2010-01 for this non-compliance.

RIS 2012-10 and EGM 12-001 – NRC Position on Application of Technical Specification (TS) Surveillance Requirements (SRs) 3.0.2 and 3.0.3 to ASME OM Code Inservice Tests that are not part of the TS SRs

On February 24, 2012, the NRC issued EGM 12-001, "Dispositioning Noncompliance with Administrative Controls Technical Specifications Programmatic Requirements that Extend Test Frequencies and Allow Performance of Missed Tests," to allow enforcement discretion and provide guidance to licensees prior to the issuance of a long term solution for addressing frequencies and frequency extensions for inservice testing (IST) intervals. The EGM also addresses the use of SR 3.0.3 for missed TS surveillances and inservice tests. The enforcement discretion made available by this EGM for inservice tests performed under 10 CFR 50.55a(f), not related to TS SRs, permits licensees to apply the provisions of the TS SR frequencies and TS SR 3.0.2 but not the provisions of TS SR 3.0.3. On August 23, 2012, the NRC issued RIS 2012-10, "NRC Staff Position on Applying Surveillance Requirements 3.0.2 and 3.0.3 to Administrative Controls Program Tests." This RIS reemphasized and clarified the information contained in EGM 12-001.

Code Case OMN-20, "Inservice Testing Frequency," which addresses IST frequency and allowable testing grace periods for ASME OM Code IST requirements was included in the 2012 Edition of the ASME OM Code. As noted in the "10 CFR 50.55a Rulemaking" section of this report, the NRC plans to propose a condition in the latest rulemaking to endorse the use of Code Case OMN-20 without requiring NRC approval. Since its publication, the NRC

authorized several individual plant alternative requests to use OMN-20 and received several more for review. For missed inservice tests (i.e., tests not performed within the required testing frequency), in lieu of TS SR 3.0.3, licensees should use the guidance in RIS 2005-20, Revision 2, "Revision to NRC Inspection Manual Part 9900 Technical Guidance, 'Operability Determinations and Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety,'" and perform an appropriate operability evaluation or functionality assessment, as needed.

NRC Staff Initiative to Improve the Requirements for Obturator Movement Verification

Over the course of the last three years, the ISTA/ISTC subgroup proposed, debated, and ultimately approved a set of changes to ISTC-3530 and ISTC-3700 to clarify the intent and test requirements for obturator movement verification. These changes were advanced to the full committee for review and comment. Comments were considered and the changes disapproved for various reasons. The results from this ballot were assessed by the NRC staff and the staff is considering that a new condition be proposed in the next rulemaking of 10 CFR 50.55a(b)(3) for clarification of the intent of the ASME OM Code. The new requirement would specify that when implementing ASME OM Code, Subsection ISTC-3700, licensees shall develop and implement a method to verify that valve operation is accurately indicated by supplementing valve position indicating lights with other indications, such as flow meters or other suitable instrumentation, to provide assurance of proper obturator position. This change addresses one of the top ten items currently being carried on the NRC/ASME interactions list.

Licensing and Inspection of Risk-Informed Categorization and Treatment of Structures, Systems, and Components for Nuclear Power Reactors under 10 CFR 50.69

NRC Inspection Procedure (IP) 37060, "10 CFR 50.69 Risk-Informed Categorization and Treatment of Structures, Systems, and Components Inspection," was issued on September 14, 2011. The IP draws in part from the ASME-developed Part 29 (Standard), "Alternative Treatment Requirements for Risk-Informed Safety Class (RISC)-3 Pumps and Valves," as well as from insights gained through a review of the South Texas Project 50.69-like treatment program.

In December 2014, Southern Nuclear was granted a license amendment to implement 10 CFR 50.69 at Vogtle Units 1 and 2. Following the initial NRC inspection of the Vogtle 50.69 implementation, lessons learned will be used to revise the inspection procedure, associated industry guidance, and RG 1.201, "Guidelines for Categorizing Structures, Systems, and Components in Nuclear Power Plants According to Their Safety Significance." The NRC staff recognizes the need for an effective, stable and predictable regulatory climate for the implementation of 10 CFR 50.69.

Mandatory Appendix III (ASME OM Code Case OMN-1) vs. Tech Spec Surveillance Requirements

The ASME OM Code currently incorporated by reference in 10 CFR 50.55a is the 2004 Edition through 2006 Addenda. Stroke time testing of motor-operated valves (MOVs) is a requirement. However, Code Case OMN-1 is an available alternative to the ASME OM Code requirements. This alternative recognizes that stroke time testing of MOVs provides little information on valve operational readiness and incorporates more sophisticated diagnostic testing. If Code Case

OMN-1 is adopted, the Code-specified stroke timing requirement is eliminated. Also, diagnostic test intervals can be extended to 10 years based on performance and engineering analysis. To date, there are 29 plants that are using or plan to use Code Case OMN-1.

In the 2009 Edition of the ASME OM Code, Code Case OMN-1 was incorporated into the Code as Mandatory Appendix III. When this ASME OM Code Edition is incorporated by reference in 10 CFR 50.55a, plants will have to adjust their MOV programs to meet this new requirement when implementing their next ten-year IST interval.

Many licensee TS contain SRs with language such as “perform MOV stroke time tests in accordance with the IST Program” at a frequency in accordance with the IST Program. When licensees adopt the 2009 (or later) Edition of the ASME OM Code, the SRs in TS for MOV stroke times may not be performed because this edition of the ASME OM Code does not require a specific stroke time measurement, and diagnostic test intervals can be as long as 10 years. This would mean that the SRs would not provide assurance that the LCO is met and therefore will not meet the regulatory requirements of 10 CFR 50.36.

The TS surveillance stroke time measurement is related to analyses of a design basis event. The ASME diagnostic test per Mandatory Appendix III or Code Case OMN-1 is evaluating MOV degradation and operational readiness. The question being discussed at the quarterly industry sponsored Technical Specification Task Force (TSTF) meetings is: “Is it acceptable to perform the TS SR requirement to verify MOV stroke time during the IST program Mandatory Appendix III or ASME OM Code Case OMN-1 diagnostic test interval which can be as long as 10 years?”

TSTF members representing the nuclear industry have voiced their opinion that verification of MOV stroke time based on the diagnostic test interval is acceptable. The NRC staff concern is that Mandatory Appendix III does not include a specific MOV stroke time measurement requirement. The NRC staff is considering proposing a condition in 10 CFR 50.55a to clarify that when applying the periodic MOV exercising requirements in Mandatory Appendix III, licensees must verify that the stroke time of the MOV satisfies the assumptions in the plant safety analyses.

ASME-Related Generic Communications

ASME-related generic communications issued by (or in the process of being issued by) the Nuclear Reactor Regulation (NRR) and the Office of New Reactors (NRO) since the last report (June 2014) to the OM Standards Committee are listed below:

Bulletins (BLs)

None

Generic Letters (GLs)

None

Information Notices (INs)

IN 2015-05 (05/12/2015):	Inoperability of Auxiliary and Emergency Feedwater Auto-Start Circuits on Loss of Main Feedwater Pumps
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Regulatory Issue Summaries

RIS-2005-20 Rev. 2 (6/5/2015):	Revision to NRC Inspection Manual Part 990 Technical Guidance, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety"
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RIS 2014-13 (12/17/2014):	Planned Licensing Action Submittals for All Power Reactor Licensees
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The full text of any of these NRC generic communications can be accessed by visiting the NRC's public website at <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/index.html>.