STATUS OF NRC ACTIVITIES OF POTENTIAL INTEREST TO OM STANDARDS COMMITTEE

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ASME OM Code Committee Meeting on December 12-14, 2018
At Clearwater Beach, FL

10 CFR 50.55a Rulemaking

Title 10 of the *Code of Federal Regulations* (10 CFR) in Section 50.55a, "Codes and standards," currently incorporates by reference the 2012 Edition of the American Society of Mechanical Engineers (ASME) *Code for Operation and Maintenance of Nuclear Power Plants* (OM Code), the 2013 Edition of the ASME *Boiler and Pressure Vessel Code* (BPV Code), Section XI, and the 2013 Edition of the ASME BPV Code, Section III, with conditions. Section 50.55a also incorporates by reference selected previous editions and addenda of the ASME OM and BPV Codes, with conditions.

The scope of the next proposed rulemaking to amend 10 CFR 50.55a includes:

2015 Edition to the ASME BPV Code, Section III, Division 1, and Section XI, Division 1, with conditions.

2017 Edition to the ASME BPV Code, Section III, Division 1, and Section XI, Division 1, with conditions.

2015 Edition to Division 1 of the ASME OM Code, with conditions.

2017 Edition to Division 1 of the ASME OM Code, with conditions.

Specific items of interest in the proposed rulemaking related to the OM Code being considered include:

1. Add NRC Inservice Testing (IST) Plan submittal and reporting requirements consistent with current edition of OM Code.

2. Revise 10 CFR 50.55a(f)(4)(i) and (ii) and (g)(4)(i) and (ii) to relax the time schedule for complying with the latest edition and addenda of the ASME OM or BPV Codes for IST and Inservice Inspection (ISI) programs, respectively, from 12 months to 18 months before the applicable milestones in these paragraphs.

3. Streamline the references to editions of the ASME OM Code in each condition to simplify future 10 CFR 50.55a rulemaking, and to update specific conditions to reflect the latest ASME OM Code editions.

ML18319A120

ASME requested that the NRC delay this rulemaking to incorporate by reference the 2017 Edition to the ASME BPV Code, Section III, Division 1 and Section XI, Division 1. The NRC Rulemaking Steering Committee agreed to accommodate ASME's request. This proposed rulemaking was published for public comment on November 9, 2018, with a 75 day public comment period. The final rulemaking package is currently scheduled to be published in the fall of 2019.

Regulatory Guide (RG) Update – OM Code Case Acceptability

Revision 2 of RG 1.192, Revision 37 of RG 1.84, and Revision 18 of RG 1.147 address the acceptability of code cases published in the 2009 Edition through the 2012 Edition of the ASME OM Code and the Sections III and XI code cases listed in Supplement 11 to the 2007 Edition and Supplements 0 through 10 to the 2010 Edition of the ASME BPV Code. The current regulations in 10 CFR 50.55a incorporate by reference these specific revisions to RGs 1.192, 1.84, and 1.147.

The NRC staff has completed a review of the new and revised code cases published with the 2015 Edition and 2017 Edition of the ASME OM Code, and the 2015 Edition and 2017 Edition of Sections III and XI of the ASME BPV Code. The proposed rulemaking and RGs for these code cases was published in the Federal Register on August 16, 2018, with a 75 day comment period. The final rulemaking and RGs for these code cases is currently scheduled to be published in the fall of 2019.

Valve Stem-Disc Connection Issues

On June 15, 2017, the NRC issued Information Notice (IN) 2017-03, "Anchor/Darling Double Disc Gate Valve Wedge Pin and Stem-Disc Separation Failures," to inform licensees and applicants of operating experience regarding Anchor/Darling (a subsidiary of Flowserve) double disc gate valve (DDGV) failures. IN 2017-03 provides a discussion of a LaSalle County Station Unit 2 Anchor/Darling DDGV failure, events at Browns Ferry that led to Part 21 reporting, and other operating experience that resulted in stem-disc separations. The IN contains information available to the NRC staff as of May 2017. The Nuclear Energy Institute (NEI) is coordinating the industry corrective action to address the potential valve stem-disc connection issues for Anchor/Darling DDGVs at operating nuclear power plants. The NRC staff is continuing its evaluation of this issue. The NRC staff held a public meeting in May 2018 to discuss the draft inspection procedure and inspection plan. The NRC staff had a helpful discussion with the industry on the draft inspection procedure and the overall results from many valves that had been reworked to date. The industry stated that 78 valves had been reworked with favorable results in that only three valves had broken or damaged wedge pins while the remaining valve wedge pins showed no damage and were in good condition. The NRC staff inquired if the industry was willing to share the diagnostic test and rework data so that the NRC staff could better understand the magnitude of the valve issue. The industry compiled the data for the 78 valves and presented the findings to the NRC staff in July 2018. The NRC staff reviewed the data and arranged a public meeting on October 10, 2018 to discuss the next steps for resolving this issue. At that meeting, the NRC staff proposed the formation of a working group consisting of NRC staff and industry MOV experts. The scope of the working group is to gather the diagnostic test data along with the valve attributes (such as valve size, wedge pin material, actuator capability, etc.) with the goal of establishing a set of acceptance criteria to be used to update the current Boiling Water Reactor Owners Group (BWROG) guidance. The intent of this effort is to identify those valves that continue to need rework versus those valves that can be

monitored instead of performing a complete repair. If the NRC staff agrees that the data provides reasonable acceptance criteria, then the NRC staff could minimize plant inspections for those plants that incorporate the revised BWROG guidance document.

Target Rock Safety Relief Valve Setpoint Drift Issue

Some licensees continue to find multiple safety relief valves (SRVs) with setpoint drift outside the Technical Specification (TS) limits each operating cycle, despite decades of corrective action. The staff's primary focus is 2-stage Target Rock SRVs but other valve types are also affected. Based on the historic LER data, 2-stage Target Rock SRV setpoints have been drifting high between 3 and 10 percent (vs. 3 percent typically allowed by TSs), with the worst observed case drifting 18.5 percent. Further, several plants have a majority of SRVs drifting beyond the TS limits, which challenges the presumption that there is a reasonable expectation the SRVs remain Operable throughout the cycle. The NRC determined that the safety significance is low, consistent with conclusion reached in the closeout of Generic Issue GI-55, "Improved Reliability of Target Rock Safety Relief Valves," in 1999. The staff is taking efforts to restore consistency between the plants' licensing basis (and TSs) and the expected SRV setpoint drift. The staff discussed this with the BWROG in public meetings in July and September, 2018, and with the NEI Regulatory Issue Task Group on October 31, 2018. The BWROG is pursuing a licensing approach to allow greater setpoint drift. In parallel, for 2-stage Target Rock SRVs, the BWROG is testing (1) new methods of applying platinum coating to the pilot valve disks and (2) different coating materials for the disks in an attempt to reduce the corrosion bonding that causes the setpoint drift. The next meeting is planned for January 2019.

NUREG-1482

The NRC staff has initiated a revision to NUREG-1482, Rev. 2, "Guidelines for Inservice Testing at Nuclear Power Plants," to reflect the most recent ASME OM Code editions and addenda incorporated by reference in the NRC regulations with the applicable conditions, and also to include IST lessons learned since issuance of the previous revision to NUREG-1482.

ASME-Related Generic Communications

ASME-related generic communications issued by (or in the process of being issued by) NRR and NRO since the last report (June 2018) to the OM Standards Committee are listed below:

Bulletins (BLs)

None

Generic Letters (GLs)

None

Information Notices (INs)

IN-2018-07 (6/13/2018) Pump/Turbine Bearing Oil Sight Glass Problems

Regulatory Issue Summaries

(RISs)

RIS-2018-05 (10/5/2018)	Supplier Oversight Issues Identified During Recent NRC Vendor Inspections

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.