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Rulemaking Conditions for 2009 Edition through 2012 Edition of ASME OM Code

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The final rule that incorporated by reference the 2009 Edition through 2012 Edition of the ASME OM Code and the 2009b Addenda through 2013 Edition of ASME Boiler and Pressure Vessel Code, Section III, Division 1 and Section XI, Division 1 was published in the *Federal Register* on July 18, 2017 (82 FR 32934).

It became effective on August 17, 2017.

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10 CFR 50.55a(b)(3)(i) OM Condition: Quality Assurance

Revised to allow use of 1994 Edition, 2008 Edition, and 2009-1a Addenda of ASME Standard NQA-1, "Quality Assurance Requirements for Nuclear Facility Applications."

Removed reference to versions of NQA-1 older than 1994 Edition.

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10 CFR 50.55a(b)(3)(ii) OM Condition: Motor Operated Valve (MOV) Testing

Condition revised to reflect new Mandatory Appendix III (MOV IST Provisions).

Appendix III incorporates Code Cases OMN-1 and OMN-11.

Conditions (A) to (C) added to be consistent with RG 1.192.

Condition (D) added to address Tech Spec issue.

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10 CFR 50.55a(b)(3)(ii)(A) MOV Diagnostic Test Interval

Licensees shall evaluate adequacy of diagnostic test intervals established for MOVs within scope of Mandatory Appendix III, not later than 5 years or 3 refueling outages (whichever is longer) from initial implementation of Appendix III.

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10 CFR 50.55a(b)(3)(ii)(B) MOV Testing Impact on Risk

When using Mandatory Appendix III, licensees shall ensure that potential increase in core damage frequency and large early release frequency associated with extension is acceptably small when extending exercise test intervals for high-risk MOVs beyond quarterly frequency.

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10 CFR 50.55a(b)(3)(ii)(C) MOV Risk Categorization

MOVs shall be categorized according to safety significance using methodology described in Code Case OMN-3 with RG 1.192 conditions, or using MOV risk-ranking methodology accepted by NRC on a plant-specific or industry-wide basis in accordance with conditions in applicable safety evaluation.

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10 CFR 50.55a(b)(3)(ii)(D) MOV Stroke Time

When applying Paragraph III-3600 of Mandatory Appendix III, licensee shall verify that stroke time of MOVs specified in plant technical specifications satisfies assumptions in plant's safety analyses.

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10 CFR 50.55a(b)(3)(iii) OM Condition: New Reactors

Applies specific conditions for IST programs at new nuclear power plants in addition to provisions of OM Code as incorporated by reference with conditions in 50.55a.

Applicable to Part 50 licensees that received construction permit 12 months after 8-17-2017, and Part 52 combined licensees with initial fuel load 12 months after 8-17-2017.

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10 CFR 50.55a(b)(3)(iii)(A) Power-Operated Valves (POVs)

Requires new reactor licensees to periodically verify capability of POVs to perform design-basis safety functions. Applicable applicants and licensees may follow method described in Vogtle Units 3 & 4 FSAR, or may establish a different method, subject to evaluation by NRC during licensing process or inspections.

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10 CFR 50.55a(b)(3)(iii)(B) Check Valves

Requires new reactor licensees to perform bi-directional testing of check valves within IST program where practicable.

Testing could be accomplished by valve-specific testing or condition monitoring activities in accordance with Appendix II to OM Code as accepted in 50.55a.

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10 CFR 50.55a(b)(3)(iii)(C) Flow-Induced Vibration (FIV)

Requires new reactor licensees to monitor FIV from hydrodynamic loads and acoustic resonance during preservice testing or inservice testing to identify potential adverse flow effects that might impact components within scope of IST program.

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10 CFR 50.55a(b)(3)(iii)(D) High-Risk Non-Safety Systems

Requires new reactor licensees to assess operational readiness of pumps, valves, and dynamic restraints within scope of Regulatory Treatment of Non-Safety Systems (RTNSS) for applicable reactor designs.

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10 CFR 50.55a(b)(3)(iv) OM Condition: Check Valves (Appendix II)

Revised to address Mandatory Appendix II, "Check Valve Conditioning Monitoring Program."

Clarifies that Appendix II implementation must include periodic sampling with new table to specify maximum intervals between check valve condition monitoring activities.

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10 CFR 50.55a(b)(3)(v) OM Condition: Snubbers ISTD

Condition on use of Subsection ISTD not modified in this rulemaking.

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10 CFR 50.55a(b)(3)(vi) OM Condition: Exercise Interval for Manual Valves

Two-year exercise interval for manual valves not modified in this rulemaking.

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10 CFR 50.55a(b)(3)(vii) OM Condition: Subsection ISTB

New condition prohibits use of Subsection ISTB in 2011 Addenda of OM Code.

Subsection ISTB in 2011 Addenda extends upper end of Acceptable Range and Required Action Range, without Mandatory Appendix V (Pump Periodic Verification).

Subsection ISTB in 2012 Edition acceptable with Appendix V.

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10 CFR 50.55a(b)(3)(viii) OM Condition: Subsection ISTE

New condition specifies that licensees who wish to implement Subsection ISTE of OM Code, 2009 Edition through 2012 Edition, must request and obtain NRC approval in accordance with 50.55a(z) to apply ISTE on a plant-specific basis as a risk-informed alternative to applicable IST requirements in OM Code.

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10 CFR 50.55a(b)(3)(ix) OM Condition: Subsection ISTF

New condition requires licensees applying Subsection ISTF in 2012 Edition of OM Code to satisfy Mandatory Appendix V.

Use of Subsection ISTF in 2011 Addenda of OM Code prohibited because extended acceptance ranges without Appendix V.

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10 CFR 50.55a(b)(3)(x) OM Condition: ASME OM Code Case OMN-20

New condition allows licensees to implement OM Code Case OMN-20 in 2012 Edition of OM Code, for editions and addenda of OM Code that are listed in 50.55a(a)(1)(iv) as being approved for incorporation by reference.

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10 CFR 50.55a(b)(3)(xi) OM Condition: Valve Position Indication

New condition specifies that when implementing Subsection ISTC-3700, licensees shall 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.

Condition begins with implementation of 2012 Edition of OM Code.

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10 CFR 50.55a(f) Preservice and Inservice Testing Requirements

Revised introductory text to indicate that systems and components must meet requirements for preservice and inservice testing in ASME Codes, and both activities referred to as “inservice testing” in paragraph (f).

No expansion of scope intended by this clarification.

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10 CFR 50.55a(f)(4) Inservice Testing Standards Requirement for Operating Plants

Revised to require that pumps and valves that are within the ASME OM Code scope must meet the IST requirements set forth in the ASME OM Code as incorporated by reference to the extent practical.

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10 CFR 50.55a(f)(4) (Continued)

Allows IST requirements for pumps and valves that are within OM Code scope, but are not classified as ASME BPV Code Class 1, 2, or 3, to be satisfied by an augmented IST program in accordance with 50.55a(f)(6)(ii) without requesting relief under 50.55a(f)(5) or alternatives under 50.55a(z).

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10 CFR 50.55a(f)(4) (Continued)

Use of augmented IST program acceptable provided basis for deviation from OM Code demonstrates acceptable level of quality or safety, or that implementing Code provisions would result in hardship or unusual difficulty without compensating increase in level of quality and safety, where documented and available for NRC review.

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Questions?