

# PUBLIC SUBMISSION

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**Docket:** NRC-2011-0088

Incorporation of American Society of Mechanical Engineers Codes and New and Revised ASME Code Cases

**Comment On:** NRC-2011-0088-0003

Incorporation by Reference of American Society of Mechanical Engineers Codes and Code Cases

**Document:** NRC-2011-0088-DRAFT-0010

Comment on FR Doc # 2015-23193

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## General Comment

Please see attached letter on behalf of the ASME Board Chair on Nuclear Codes and Standards.

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## Attachments

NRC Letter



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November 30, 2015

**Secretary, U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001**

**Attention:** Rulemakings and Adjudications Staff

**Subject:** **Comments on Incorporation by Reference of American Society of  
Mechanical Engineers Codes and Code Cases, 10 CFR Part 50, RIN 3150-  
AI97**

**Reference:** 1. Federal Register / Vol. 80, No. 181, pp. 56820-56864 / Friday, September 18,  
2015 / Proposed Rules

**Enclosure:** 1. ASME Comments on the Proposed Rule for 10 CFR 50.55a

Dear Secretary:

ASME is pleased to have the opportunity to provide comments and suggestions on your Nuclear Regulatory Commission (NRC), 10 CFR Part 50, RIN 3150-AI97, Incorporation by Reference of American Society of Mechanical Engineers Codes and Code Cases, Proposed Amended Requirements, published in Reference 1.

Specifically, ASME supports the NRC's endorsement of later editions, addenda, and revisions to its Nuclear Codes, Standards, and Code Cases in the Code of Federal Regulations in 10 CFR 50.55a. It is our understanding that within this proposed rulemaking, the NRC is amending this regulation to incorporate by reference the following ASME Codes, Standards, and Code Cases:

1. The 2009 Addenda, 2010 Edition, 2011 Addenda, and the 2013 Edition of Section III, Division 1 and Section XI, Division 1 of the ASME Boiler and Pressure Vessel (BPV) Code, with conditions
2. The 2009 Edition, 2011 Addenda, and the 2012 Edition of the ASME Operation and Maintenance (OM) Code, with conditions
3. The 1983 Edition through the 1994 Edition, the 2008 Edition, and the 2009-1a Addenda to the 2008 Edition of ASME NQA-1, with conditions
4. ASME BPV Code Cases N-729-4, N-770-2, and N-824, with conditions
5. ASME OM Code Case OMN-20

The ASME comments included in Enclosure 1 are intended to support the nuclear industry while protecting the health and safety of the public, without placing unnecessary burden on licensees. Thus, Enclosure 1 is provided for the use by the NRC staff to support, reconsider, remove, or modify its proposed (and existing) conditions where comments are provided. It is hoped that upon review of these ASME comments that the NRC staff will be able to allow the necessary

changes to be made or modify the conditions in the final rule to such a degree as to fully endorse the ASME Nuclear Codes and Standards contained in this proposed rulemaking.

If you have any questions in regards to the contents of this letter, please direct them to Mr. Christian Sanna, Director, ASME Nuclear Codes & Standards by telephone (212) 591-8513 or by e-mail [SannaC@asme.org](mailto:SannaC@asme.org).

Very Truly Yours,

A handwritten signature in black ink, appearing to read 'R Hill III', with a stylized flourish at the end.

Ralph Hill III, Chair  
ASME Board on Nuclear Codes and Standards  
[hillr@asme.org](mailto:hillr@asme.org)

cc: Members, ASME Board on Nuclear Codes and Standards  
Members, ASME Standards Committee on Operation and Maintenance of Nuclear Power Plants  
Members, ASME BPV Committee on Construction of Nuclear Facility Components (III)  
Members, ASME BPV Committee on Nuclear Inservice Inspection (XI)

<b>§50.55a (New Proposed Requirements are denoted by Bold Italics)</b>	<b>Existing §50.55a Regulations (as of 09/17/2015)</b>	<b>Proposed Changes to §50.55a Regulations (Draft Rule)</b>	<b>ASME Comments on §50.55a Regulations - Existing and Proposed Changes</b>
§50.55a(a)(1)(ii)	(ii) <i>ASME Boiler and Pressure Vessel Code, Section XI</i> . The editions and addenda for Section XI of the ASME Boiler and Pressure Vessel Code are listed below, but limited to those provisions identified in paragraph (b)(2) of this section.	(ii) <i>ASME Boiler and Pressure Vessel Code, Section XI</i> . The editions and addenda for Section XI of the ASME Boiler and Pressure Vessel Code (excluding Nonmandatory Appendix U) are listed below, but limited by those provisions identified in paragraph (b)(2) of this section.	Nonmandatory Appendix U was developed to incorporate the provisions of Code Cases N-513-3 and N-705, without any technical changes. It is not clear as to why §50.55a should exclude Nonmandatory Appendix U because the NRC has approved the use of Code Case N-513-3 in Table 2 of Regulatory Guide 1.147 and has approved Code Case N-705 in Table 1 of Regulatory Guide 1.147. Based on this, ASME recommends that Nonmandatory Appendix U be incorporated by reference in §50.55a.
§50.55a(a)(1)(iii)(C)	(C) <i>ASME Code Case N-770-1</i> . ASME Code Case N-770-1, "Additional Examinations for PWR Pressure Retaining Welds in Class 1 Components Fabricated with Alloy 600/82/182 Materials, Section XI, Division 1" (Approval Date: December 25, 2009), with the conditions in paragraph (g)(6)(ii)(F) of this section.	(C) ASME BPV Code Case N-770-2. ASME BPV Code Case N-770-2, "Alternative Examination Requirements and Acceptance Standards for Class 1 PWR Piping and Vessel Nozzle Butt Welds Fabricated with UNS N06082 or UNS W86182 Weld Filler Material With or Without Application of Listed Mitigation Activities Section XI, Division 1" (Approval Date: June 9, 2011), with the conditions in paragraph (g)(6)(ii)(F) of this section.	ASME recommends that §50.55a(a)(1)(iii)(C) be revised to incorporate by reference Code Case N-770-3 or N-770-4, in lieu of N-770-2, for reasons cited in comments provided on §50.55a (g)(6)(ii)(F) later in this enclosure.
<b>§50.55a(a)(1)(iii)(E)</b>	N/A	(E) ASME OM Code Case OMN-20. ASME OM Code Case OMN-20, "Inservice Test Frequency," in the 2012 Edition of the ASME OM Code. OMN-20 is referenced in paragraph (b)(3)(x).	ASME supports the incorporation by reference of OM Code Case OMN-20. This is a very important change as this will provide for flexibility for testing due to unforeseen circumstances without requiring regulatory approval and still provide for the detection and monitoring of degradation in a sufficient manner and under adequate frequency of testing and control.
<b>§50.55a(a)(1)(v)(A)</b>	N/A	(A) ASME NQA-1, "Quality Assurance Program Requirements for Nuclear Facilities."	ASME supports the incorporation by reference of NQA-1.
<b>§50.55a(b)(1)(viii)</b>	N/A	(viii) <i>Section III condition</i> : Use of ASME certification marks. When applying editions and addenda earlier than the 2011 Addenda to the 2010 Edition, licensees may use either the ASME BPV Code Symbol Stamps or the ASME Certification Marks with the appropriate certification designators and class designators as specified in the 2013 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1) of this section.	ASME supports the addition of this proposed condition to address use of components stamped with either the ASME Code Symbol Stamp or the ASME Certification Mark.

<b>§50.55a (New Proposed Requirements are denoted by Bold Italics)</b>	<b>Existing §50.55a Regulations (as of 09/17/2015)</b>	<b>Proposed Changes to §50.55a Regulations (Draft Rule)</b>	<b>ASME Comments on §50.55a Regulations - Existing and Proposed Changes</b>
§50.55a(b)(2)	(2) <i>Conditions on ASME BPV Code Section XI.</i> As used in this section, references to Section XI refer to Section XI, Division 1, of the ASME Boiler and Pressure Vessel Code, and include the 1970 Edition through the 1976 Winter Addenda and the 1977 Edition through the 2007 Edition with the 2008 Addenda, subject to the following conditions:	(2) <i>Conditions on ASME BPV Code, Section XI.</i> As used in this section, references to Section XI refer to Section XI, Division 1, of the ASME Boiler and Pressure Vessel Code, and include the 1970 Edition through the 1976 Winter Addenda and the 1977 Edition through the 2013 Edition (excluding Nonmandatory Appendix U), subject to the following conditions:	See ASME comment on §50.55a(a)(1)(ii).
§50.55a(b)(2)(viii)	(viii) <i>Section XI condition: Concrete containment examinations.</i> Applicants or licensees applying Subsection IWL, 1992 Edition with the 1992 Addenda, must apply paragraphs (b)(2)(viii)(A) through (E) of this section. Applicants or licensees applying Subsection IWL, 1995 Edition with the 1996 Addenda, must apply paragraphs (b)(2)(viii)(A), (b)(2)(viii)(D)(3), and (b)(2)(viii)(E) of this section. Applicants or licensees applying Subsection IWL, 1998 Edition through the 2000 Addenda, must apply paragraphs (b)(2)(viii)(E) and (F) of this section. Applicants or licensees applying Subsection IWL, 2001 Edition through the 2004 Edition, up to and including the 2006 Addenda, must apply paragraphs (b)(2)(viii)(E) through (G) of this section. Applicants or licensees applying Subsection IWL, 2007 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, must apply paragraph (b)(2)(viii)(E) of this section.	(viii) <i>Section XI condition: Concrete containment examinations.</i> Applicants or licensees applying Subsection IWL, 1992 Edition with the 1992 Addenda, must apply paragraphs (b)(2)(viii)(A) through (E) of this section. Applicants or licensees applying Subsection IWL, 1995 Edition with the 1996 Addenda, must apply paragraphs (b)(2)(viii)(A), (b)(2)(viii)(D)(3), and (b)(2)(viii)(E) of this section. Applicants or licensees applying Subsection IWL, 1998 Edition through the 2000 Addenda, must apply paragraphs (b)(2)(viii)(E) and (F) of this section. Applicants or licensees applying Subsection IWL, 2001 Edition through the 2004 Edition, up to and including the 2006 Addenda, must apply paragraphs (b)(2)(viii)(E) through (G) of this section. Applicants or licensees applying Subsection IWL, 2007 Edition up to and including the 2008 Addenda must apply paragraph (b)(2)(viii)(E) of this section. Applicants or licensees applying Subsection IWL, 2007 Edition with the 2009 Addenda through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, must apply paragraph (b)(2)(viii)(H) and (b)(2)(viii)(I) of this section.	<ol style="list-style-type: none"> <li>1. In lieu of adding new condition §50.55a(b)(2)(viii)(H), ASME recommends revising the last sentence of §50.55a(b)(2)(viii) to read as follows:  “Applicants or licensees applying Subsection IWL, 2007 Edition with the 2009 Addenda through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, must apply paragraph (b)(2)(viii)(E) and (b)(2)(viii)(H) of this section.”</li> <li>2. ASME recommends that the proposed condition §50.55a(b)(2)(viii)(H) be deleted.</li> <li>3. ASME recommends removing the 5 year frequency for performing the technical evaluation under IWL-2512(b). In addition, this condition should be renumbered as §50.55a(b)(2)(viii)(H) if the proposed condition §50.55a(b)(2)(viii)(H) is deleted as recommended.</li> </ol>
<b>§50.55a(b)(2)(viii)(H)</b>	N/A	(H) <i>Concrete containment examinations: Eighth provision.</i> For each inaccessible area of concrete identified for evaluation under IWL-2512, the licensee must provide the applicable information specified in paragraphs (b)(2)(viii)(E)(1), (b)(2)(viii)(E)(2), and (b)(2)(viii)(E)(3) of this section in the ISI Summary Report required by IWA-6000.	ASME believes that the purpose of this new condition (b)(2)(viii)(H) should be solely to extend the application of the conditions in 50.55a(b)(2)(viii)(E) to the 2013 Edition that apply when using the 2007 Edition with the 2008 Addenda. However, it is unclear whether this new condition is intended to apply to inaccessible areas identified as being suspect in accordance with IWL-2512(a), or whether this condition is intended to also apply to IWL-2512(b). Evaluations performed in accordance with IWL-2512(b) would not necessarily identify any inaccessible areas of concrete that would be considered suspect.  See comment provided for §50.55a(b)(2)(viii) for ASME recommendation.

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<b><i>§50.55a(b)(2)(viii)(I)</i></b>	N/A	<b><i>(I) Concrete containment examinations: Ninth provision.</i></b> During the period of extended operation of a renewed license under part 54 of this chapter, the licensee must perform the technical evaluation under IWL-2512(b) of inaccessible below-grade concrete surfaces exposed to foundation soil, backfill, or groundwater at periodic intervals not to exceed 5 years. In addition, the licensee must examine representative samples of the exposed portions of the below-grade concrete, when such below-grade concrete is excavated for any reason.	The requirements in IWL-2512(b) were developed by ASME using information obtained from the GALL Report and, during the development of IWL-2512(b), ASME had determined that a 10 year frequency was adequate. ASME does not believe that operating experience warrants imposing a 5 year frequency for this evaluation. In addition, not all plants have committed to GALL, Revision 2 where the 5 year frequency is required.  <i>ASME recommends that §50.55a(b)(2)(viii)(I) be revised to delete the proposed condition to perform the IWL-2512(b) evaluation every 5 years.</i>  IWL-2512(b)(6) in the 2013 Edition contains a requirement that the technical evaluation address requirements for examination of representative samples of below-grade concrete, if excavated for any reason, when an aggressive below-grade environment is present. For this reason, it is unclear why the proposed condition is necessary. For plants that have been evaluated and do not have an aggressive below-grade environment, this requirement may not be warranted.
§50.55a(b)(2)(ix)(H)	<b><i>(H) Metal containment examinations: Eighth provision.</i></b> Containment bolted connections that are disassembled during the scheduled performance of the examinations in Item E1.11 of Table IWE-2500-1 must be examined using the VT-3 examination method. Flaws or degradation identified during the performance of a VT-3 examination must be examined in accordance with the VT-1 examination method. The criteria in the material specification or IWB-3517.1 must be used to evaluate containment bolting flaws or degradation. As an alternative to performing VT-3 examinations of containment bolted connections that are disassembled during the scheduled performance of Item E1.11, VT-3 examinations of containment bolted connections may be conducted whenever containment bolted connections are disassembled for any reason.	No change proposed.	ASME believes that this existing condition may be confusing as it could be interpreted to mean that each time the connection is disassembled it would require a VT-3 examination. Because the ASME Code requires that each bolted connection be examined once during each interval, ASME believes that it may be more appropriate to revise this condition to read as follows:  “Containment bolted connections that are disassembled during the inspection interval shall be examined at least once with the connection disassembled using the VT-3 examination method. Flaws or degradation identified during the performance of a VT-3 examination must be examined in accordance with the VT-1 examination method. The criteria in the material specification or IWB-3517.1 must be used to evaluate containment bolting flaws or degradation. If the containment bolted connection is not disassembled during the inspection interval, the bolted connections shall be examined with the bolting in place at least once during the inspection interval.”
§50.55a(b)(2)(xii)	<b><i>(xii) Section XI condition: Underwater welding.</i></b> The provisions in IWA-4660, "Underwater Welding," of Section XI, 1997 Addenda through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, are not approved for use on irradiated material.	No change proposed.	IWA-4660 was revised in the 2010 Edition to address this condition. ASME Record #09-1618 was approved by the Section XI Standards Committee on Letter Ballot #10-2158 with support from the NRC member on the standards committee.  <i>ASME recommends that this condition be revised such that applies only to those editions and addenda earlier than the 2010 Edition.</i>

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§50.55a(b)(2)(xv)	<i>(xv) Section XI condition: Appendix VIII specimen set and qualification requirements. Licensees using Appendix VIII in the 1995 Edition through the 2001 Edition of the ASME Boiler and Pressure Vessel Code may elect to comply with all of the provisions in paragraphs (b)(2)(xv)(A) through (M) of this section, except for paragraph (b)(2)(xv)(F) of this section, which may be used at the licensee's option. Licensees using editions and addenda after 2001 Edition through the 2006 Addenda must use the 2001 Edition of Appendix VIII and may elect to comply with all of the provisions in paragraphs (b)(2)(xv)(A) through (M) of this section, except for paragraph (b)(2)(xv)(F) of this section, which may be used at the licensee's option.</i>	No change proposed.	<p>The proposed revision to §50.55a(a)(1)(ii)(C)(50) through (53) - incorporates by reference the 2009 Addenda through the 2013 Edition of Section XI of the ASME B&amp;PV Code, with conditions. When combined with paragraph (b)(2)(xv), the resulting regulation will have various licensees invoking distinctly different versions of Appendix VIII. Licensees using the 1995 Edition with 1996 Addenda through the 2001 Edition of Section XI would implement the edition and addenda of Appendix VIII that corresponds to the Code year of Section XI that they are using. Licensees using the 2002 through 2006 Addenda of Section XI would still implement the 2001 Edition of Appendix VIII. Licensees updating to the 2007 through the 2013 Editions of Section XI would be expected to implement the version of Appendix VIII corresponding to the Code year to which they were updating.</p> <p>Appendix VIII in the 1995 through 2001 Editions of Section XI are inconsistent, in certain respects, with Appendix VIII in the 2007 through 2013 Editions. For instance, the titles and corresponding scopes of Supplements 5 and 7 have significantly changed, over those years. Additionally, there have been a significant number of Code actions to clarify the rules in Appendix VIII supplements, since the publishing of the 1995 Edition with 1996 Addenda. All of this creates difficulty with maintaining an industry qualification program or one set of generic industry inspection procedures that effectively encompasses all these Code years. While the incremental revisions to Appendix VIII have not introduced insurmountable technical impacts, meeting the requirements of all of them, simultaneously, will require that the industry qualification program, procedures, and qualification records be reviewed, at a minimum, and potentially modified in order to accommodate all possible versions that may be implemented in the nuclear fleet. These types of programmatic challenges require significant time and industry resources to resolve, and lend themselves to increased human performance errors in implementation.</p> <p>A relatively simple solution to this issue would be if all licensees, subject to 10CFR50.55a, were allowed to automatically adopt the version of Appendix VIII that resides in the latest NRC approved edition and addenda of Section XI, with no prior Commission approval being required. This would enable an industry qualification program, such as the EPRI Performance Demonstration Program, to review and update to one version of Appendix VIII each time 10CFR50.55a was revised. And each licensee would simply have to reference the EPRI PD Program's compliance document in their ISI program.</p> <p><i>To accommodate the request above, ASME recommends that §50.55a(b)(2)(xv) be revised to add the following sentence to the end of §50.55a(b)(2)(xv):</i></p> <p><i>“Alternatively, licensees may elect to use Appendix VIII in the latest edition and addenda of the ASME Boiler and Pressure Vessel Code incorporated by</i></p>

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			<p><i>reference in paragraph (a) of this section, subject to any applicable conditions listed in paragraph (b) of this section.”</i></p> <p>ASME recognizes that licensees may request approval to use all or portions of later editions and addenda of the ASME Code, Section XI that are incorporated by reference in §50.55a using the guidance in NRC Regulatory Issue Summary 2004-12. However, a simple change to §50.55a(b)(2)(xv), as recommended above, would eliminate the administrative burden associated with the development, submittal, and approval of these requests.</p>
§50.55a(b)(2)(xvii)	(xvii) <i>Section XI condition: Reconciliation of quality requirements.</i> When purchasing replacement items, in addition to the reconciliation provisions of IWA-4200, 1995 Addenda through 1998 Edition, the replacement items must be purchased, to the extent necessary, in accordance with the licensee's quality assurance program description required by 10 CFR 50.34(b)(6)(ii).	No change proposed.	<p>ASME understands that the NRC had imposed this condition because the NRC may have believed that IWA-4222(a)(2) in the 1995 Addenda through the 1999 Addenda would have allowed a licensee to eliminate the reconciliation of applicable QA Program requirements (i.e., 10 CFR 50, App. B; NQA-1; NCA-3800).</p> <p>The ASME Code has never stated that an Owner could reconcile to a Quality Assurance Program not endorsed by the NRC (10 CFR50, Appendix B; NQA-1; or ASME III NCA-4000). It is ASME’s position that IWA-4222(a)(2) only allows a user to reconcile between endorsed Quality Assurance Programs.</p> <p>To address this concern, an endnote was added to IWA-4222(a)(2) in the 2000 Addenda (ASME Record #99-491) to clarify that the reconciliation provisions regarding administrative requirements do not negate nor modify the Owner's QA Program requirements. The intent of this change was to eliminate the concern that an Owner could misinterpret the Code to allow any exception to an Owner’s QA Program requirements.</p> <p><i>ASME recommends that the existing condition in §50.55a(b)(2)(xvii) be removed for reasons outlined above.</i></p>
<b>§50.55a(b)(2)(xviii)(D)</b>	N/A	(D) <i>NDE personnel certification: Fourth provision.</i> The use of Appendix VII and subarticle VIII-2200 of the 2011 Addenda and 2013 Edition of Section XI of the ASME BPV Code is prohibited. When using ASME BPV Code, Section XI editions and addenda later than the 2010 Edition, licensees and applicants must use the prerequisites for ultrasonic examination personnel certifications in Table VII-4110-1 and subarticle VIII-2200, Appendix VIII in the 2010 Edition.	<p>With the aging workforce and the need for NDE personnel in working shorter outages, it is important to be able to qualify NDE personnel quicker than in the past with the understanding that NDE personnel still need to be qualified and certified prior to performing the NDE. ASME believes that the requirements of Appendix VII and subarticle VIII-2200 of the 2011 Addenda and 2013 Edition are appropriate, especially since Level I personnel cannot accept/reject examination results and that Level II personnel still need to pass an Appendix VIII qualification prior to performing the NDE.</p> <p><i>ASME recommends deleting this proposed condition.</i></p>
§50.55a(b)(2)(xx)(B)	(B) <i>System leakage tests: Second provision.</i> The NDE provision in IWA-4540(a)(2) of the 2002 Addenda of Section XI must be applied when performing system leakage tests after repair and replacement activities	No change proposed.	ASME has addressed this condition in Record #10-1245, requesting that a letter be submitted to the NRC asking for this condition to be deleted. In lieu of submitting a letter to the NRC, the content of the proposed ASME letter is provided below.



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	<p>performed by welding or brazing on a pressure retaining boundary using the 2003 Addenda through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section.</p>		<p>IWA-4540(a) in the 2002 Addenda, reads as follows:</p> <p>“(a) Unless exempted by IWA-4540(b), repair/replacement activities performed by welding or brazing on a pressure-retaining boundary shall include IWA-4540(a)(1) or IWA-4540(a)(2). Only brazed joints and welds made in the course of a repair replacement activity require pressurization and VT-2 visual examination during the test.</p> <p>(1) A system hydrostatic test shall be performed in accordance with IWA-5000 prior to returning to service.</p> <p>(2) The following requirements shall be met.</p> <p>(a) The nondestructive examination method and acceptance criteria of the 1992 Edition or later of Section III shall be met prior to return to service.</p> <p>(b) A system leakage test shall be performed in accordance with IWA-5000 prior to or as part of returning to service.”</p> <p>Additionally, in the 2003 Addenda, ASME Section XI, IWA-4540(a) reads as follows:</p> <p>“(a) Unless exempted by IWA-4540(b), repair/replacement activities performed by welding or brazing on a pressure-retaining boundary shall include a hydrostatic or system leakage test in accordance with IWA-5000, prior to, or as part of, returning to service. Only brazed joints and welds made in the course of a repair replacement activity require pressurization and VT-2 visual examination during the test.”</p> <p>IWA-4540(a) was revised because the requirements of IWA-4540(a)(2) sometimes exceed those of the Construction Code of the affected component, and therefore the original construction and operating permit requirements. These additional requirements impose an unnecessary burden on the licensee and are not necessary to ensure safe operation.</p> <p>The NRC Staff (in previous rulemaking comments) expressed a concern regarding “vintage plants” constructed using ASME B31.1. The NRC Staff concern was directed toward those components within the ASME Section XI Class 2 and 3 boundaries that were not subject to volumetric examination during original construction, and, as a result, would not be subject to volumetric examination following repair/replacement activities. The NRC stated, “A system pressure test or hydrostatic pressure test does not verify the structural integrity of the repaired piping components.”</p> <p>This NRC position implies that existing ASME Section XI, Class 2 and 3 components that were not subject to volumetric examination during original</p>

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			<p>construction are now unsuitable for continued operation, in part because the original hydrostatic test is insufficient to verify structural integrity. This supposition includes those components constructed to ASME III, as well as those constructed to “vintage codes.” Yet, the NRC condition on use of IWA-4540(a) permits use of a similar (or lower-pressure) hydrostatic test without any additional NDE beyond that required during the original plant construction.</p> <p>This conclusion is also supported by the NRC’s response to a 19 June 2007 (Duke Energy, Ref. 2, pg. 52732) public comment posed on the draft ruling regarding the necessity of a backfit analysis due to the retroactive ruling on IWA-4540(a), as related to certain licensees that had been approved to use the 2003 Addenda of ASME Section XI, prior to implementation of the above-referenced final rule. In the NRC’s response to the commenter, the NRC agreed that there would be some degree of backfit to adjust to the new rulemaking; however, the NRC states that the additional examination is “paramount to public safety and is therefore exempt from a backfit analysis.”</p> <p>However, by not imposing volumetric examination on all existing ASME Section XI, Class 2 and 3 components not subjected to repair/replacement activities, the NRC must believe that such examinations are unnecessary for ensuring safe operation of those components.</p> <p>The ASME has an entirely different opinion. The ASME Boiler and Pressure Vessel Code has long relied on a specified relationship between nondestructive examination and allowable stresses. Vintage codes, such as ANSI B31.1, have lower allowable stresses, due to the fact nondestructive examination is generally not required. Whereas nuclear codes (ASME Section III and B31.7) have higher allowable stress intensities for Class 1 components relative to Class 2 and 3 components, due mostly to the additional examinations required for Class 1 construction. This methodology is similar to that in ASME Section VIII, which applies a graded method to allow the manufacturer to increase the allowable stress (SE product in the denominator of the thickness equation) by virtue of additional examinations. Thus, additional NDE can result in decreased material thickness.</p> <p>ASME has never established any relationship between the test pressure to which a component is subjected and any other material or design characteristic. In fact, the test pressures specified in ASME B31.1 and all sections of the ASME Boiler and Pressure Vessel Code are essentially arbitrary, particularly with respect to design requirements. The primary technical consideration in development of the required test pressure is to ensure that it is low enough to prevent yielding of the material. ASME agrees that hydrostatic testing does not prove structural integrity; it proves only leak tightness. Similarly, NDE alone does not ensure structural integrity. ASME ensures structural integrity through a combination of</p>

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			<p>many factors, including material testing, design formulas, design factors, and qualification of personnel. Adding more NDE than required by the Construction Code (be it ASME Section III or B31.1) would be unrelated to enhancing structural integrity.</p> <p>In conclusion, the ASME believes that the additional nondestructive examination imposed by the NRC condition is unnecessary, and implies that existing components are unsuitable.</p> <p><i>ASME therefore requests that the NRC Staff remove the referenced condition from 10CFR50.55a(b)(2)(xx)(B).</i></p>
§50.55a(b)(2)(xxi)(A)	<p><i>(A) Table IWB-2500-1 examination requirements: First provision.</i> The provisions of Table IWB 2500-1, Examination Category B-D, Full Penetration Welded Nozzles in Vessels, Items B3.40 and B3.60 (Inspection Program A) and Items B3.120 and B3.140 (Inspection Program B) of the 1998 Edition must be applied when using the 1999 Addenda through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section. A visual examination with magnification that has a resolution sensitivity to detect a 1-mil width wire or crack, utilizing the allowable flaw length criteria in Table IWB-3512-1, 1997 Addenda through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, with a limiting assumption on the flaw aspect ratio (i.e., <math>a/l = 0.5</math>), may be performed instead of an ultrasonic examination.</p>	<p><i>(A) Table IWB-2500-1 examination requirements: First provision.</i> The provisions of Table IWB 2500-1, Examination Category B-D, Full Penetration Welded Nozzles in Vessels, Items B3.40 and B3.60 (Inspection Program A) and Items B3.120 and B3.140 (Inspection Program B) of the 1998 Edition must be applied when using the 1999 Addenda through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section. A visual examination with magnification that has a resolution sensitivity to resolve 0.044 inch (1.1 mm) lower case characters without an ascender or descender (e.g., a, e, n, v), utilizing the allowable flaw length criteria in Table IWB-3512-1, 1997 Addenda through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, with a limiting assumption on the flaw aspect ratio (i.e., <math>a/l = 0.5</math>), may be performed instead of an ultrasonic examination.</p>	<p><i>ASME supports the proposed change to this condition.</i></p>
§50.55a(b)(2)(xxiii)	<p><i>(xxiii) Section XI condition: Evaluation of thermally cut surfaces.</i> The use of the provisions for eliminating mechanical processing of thermally cut surfaces in IWA-4461.4.2 of Section XI, 2001 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, is prohibited.</p>	<p>No change proposed.</p>	<p>ASME Record #06-853 revised IWA-4461.4, and deleted paragraph IWA-4461.4.2. This action was approved by the Section XI Standards Committee with an NRC affirmative vote (on Letter Ballot #09-840RC1) and was published in the 2010 Edition.</p> <p><i>ASME recommends that the NRC revise this condition so that it applies only to the 2001 Edition through the 2009 Addenda.</i></p>
§50.55a(b)(2)(xxv)	<p><i>(xxv) Section XI condition: Mitigation of defects by modification.</i> The use of the provisions in IWA-4340, "Mitigation of Defects by Modification," Section XI, 2001 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section are prohibited.</p>	<p>No change proposed.</p>	<p>The prohibition on the use of IWA-4340 was included in the final rule for the 2003 Addenda of Section XI, 69 FR 58804 on October 1, 2004. The reasons stated for the prohibition were:</p> <ul style="list-style-type: none"> <li>• Multiple applications of a modification at a single location are not prohibited.</li> </ul>

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			<ul style="list-style-type: none"> <li>• The possible exemption of pressure testing for certain modifications.</li> <li>• The lack of minimum examination frequency to validate predicted flaw growth rates.</li> <li>• IWA-4340 does not specify examination methods and qualification requirements by reference to existing code rules.</li> <li>• The lack of clarity regarding the acceptability of defect growth beyond the bounds of the modification.</li> </ul> <p>In 2008 ASME formed a Task Group to address the NRC concerns with IWA-4340. That Task Group worked for three years to develop a Code revision (Record 05-700) to address these issues. That Code revision was approved and published in the 2011 Addenda.</p> <p>IWA-4340 in the 2011 Addenda through the 2013 Edition, address all of the NRC concerns identified in the Federal Register, and some additional concerns identified by the NRC during Task Group meetings:</p> <ul style="list-style-type: none"> <li>• IWA-4340(m) prohibits multiple applications of a modification at the same location.</li> <li>• IWA-4340(l) mandates a system pressure test for all modifications.</li> <li>• IWA-4340(g), (h), and (i) stipulate minimum examination frequencies and requires validation of the predicted flaw growth rates by examination for high energy systems. For moderate energy systems validation of flaw growth rates is required or an increased examination frequency is mandated.</li> <li>• IWA-4340(g) stipulates use of volumetric examination in accordance with Mandatory Appendix I, and clarifies that actual or projected flaw growth into material credited for structural integrity of the item is unacceptable.</li> <li>• Additionally, use of IWA-4340 is not permitted in Class 1 systems.</li> </ul> <p>Since all of the concerns identified in 69 FR 58804 have been addressed, ASME believes it is inappropriate for the NRC to continue the prohibition of IWA-4340.</p> <p>ASME believes the NRC should review IWA-4340 in the 2011 Addenda through 2013 Edition and approve its use. If the NRC has additional concerns</p>

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			<p>with IWA-4340, the NRC should publish them and provide for a period of public comment prior to issuing the final rule.</p> <p><i>For the reasons stated above, ASME recommends that this condition be revised so that it applies only to the 2001 Edition through the 2010 Edition.</i></p>
§50.55a(b)(2)(xxvi)	<p>(xxvi) <i>Section XI condition: Pressure testing Class 1, 2 and 3 mechanical joints.</i> The repair and replacement activity provisions in IWA-4540(c) of the 1998 Edition of Section XI for pressure testing Class 1, 2, and 3 mechanical joints must be applied when using the 2001 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section.</p>	No change proposed.	<p>Comment 1:</p> <p>ASME has addressed this condition in Record #10-1353, requesting that a letter be submitted to the NRC asking for this condition to be deleted. In lieu of submitting a letter to the NRC, the content of the proposed ASME letter is provided below.</p> <p>10 CFR 50.55a(b)(2)(xxvi) of the NRC Code of Federal Regulations has supplemented the test provisions in IWA-4540 of the 2001 Edition and the 2002 and 2003 Addenda of Section XI of the ASME BPV Code by adding a condition to require that Class 1, 2, and 3 mechanical joints be pressure tested in accordance with IWA-4540(c) of the 1998 Edition of Section XI.</p> <p>The Code requirement to conduct a system leakage test during operation at nominal operating pressure to identify leakage after reassembly of a mechanical joint was deleted in the 1999 Addenda of Section XI. This Code requirement was deleted in part because mechanical joint leakage, since it is not through wall leakage, is not prohibited by Section XI.</p> <p>Section XI does not provide acceptance criteria for leakage at mechanical joints, and it has always been the responsibility of each licensee to determine if the leakage is acceptable and if corrective action is required. Leakage occurring at mechanical connections would be past the gasket, packing, or seal materials and with the exception of leakage in a system containing boric acid (which is addressed in the following sentence), does not compromise the structural integrity of the pressure boundary. In the case of leakage in a system containing boric acid, each utility has a Boric Acid Corrosion Control Program in place that monitors systems containing boric acid to assure that the structural integrity of the pressure boundary of the system is maintained. Provided technical specification requirements are satisfied, achieving leak tightness is considered a maintenance activity.</p> <p>Furthermore, the purpose of the Section XI system leakage test following a repair/replacement activity is to monitor for leakage, not to verify the structural integrity of the pressure boundary. As stated in a July 28, 1972 white paper, "Development of Inservice Inspection Safety Philosophy for U.S. Nuclear Power Plants" (Reference):</p>

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			<p>“The inservice system hydrostatic test required by the ASME Section XI Code reflects the acceptance of the pressure test as, primarily, a means to enhance leakage detection during the examination of components under pressure rather than solely as a measure to determine the structural integrity of the components. This test differs from the shop and pre-operational system hydrostatic tests required by the rules of the ASME Section III Code....”</p> <p>The white paper was authored by S.H. Bush, USAEC – Advisory Committee on Reactor Safeguards and R.R. Maccary, U.S. Atomic Energy Commission. The purpose of the paper was to state the general philosophy that led to the development of the Section XI Code together with a general description of code coverage.</p> <p>The revised system leakage test requirements in the 1999 Addenda and later editions and addenda are consistent with the construction requirements for mechanical joint leakage in Section III of the ASME Code. Section III does not prohibit leakage at mechanical connections, and requires only that mechanical connection leakage not mask other leakage.</p> <p>Operators and system engineers periodically monitor systems for leakage and evaluate if corrective action is warranted when leakage is identified.</p> <p>Post-maintenance test programs required by operating plants’ current licensing bases specify requirements for leak testing mechanical connections following reassembly. Section XI does not provide any acceptance criteria for mechanical joint leakage following reassembly, and it has always been the responsibility of licensees to determine if corrective action is warranted.</p> <p>In conclusion, based on the clarifications above, the ASME Standards Committee on Nuclear Inservice Inspection (SC XI) asserts that the current provisions of IWA-4540 should be endorsed by the NRC in 10 CFR 50.55a, without exception or limitation.</p> <p><i>ASME recommends that the condition in §50.55a(b)(2)(xxvi) be deleted for reasons specified above.</i></p> <p>Comment 2:</p> <p>In 2010, ASME issued Interpretation XI-1-10-20, clarifying that replacement of only bolting in a mechanical joint does not constitute making a mechanical joint. With this clarification, it is ASME’s position that IWA-4540(c) in the 1998 Edition does not apply when making a</p>

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			<p>mechanical joint during which only the bolting is replaced. It should also be noted that during maintenance activities where bolting is removed and reinstalled, ASME Section XI requirements do not apply and that no pressure test is required by the Code.</p> <p>ASME understands that there may be some confusion in the industry as to the applicability of §50.55a(b)(2)(xxvi) when only bolting is replaced in a mechanical joint.</p> <p><i>If the NRC chooses not to delete the condition in §50.55a(b)(2)(xxvi), as recommended by ASME in Comment 1, ASME recommends that the NRC confirm that the existing §50.55a(b)(2)(xxvi) condition does not take exception to the requirement of IWA-4540(c) in the 1998 Edition (as clarified by Interpretation XI-1-10-20). If clarification of these requirements warrants revising §50.55a(b)(2)(xxvi), then ASME recommends that the NRC consider clarifying this condition.</i></p>
<b><i>§50.55a(b)(2)(xxx)</i></b>		(xxx) <i>Section XI condition:</i> Steam generator preservice examinations. Prior to plant start up with a newly installed steam generator, a 100 percent full length examination will be conducted of the tubing in each new steam generator instead of the preservice inspection requirements of IWB-2200(c).	<p>In the rulemaking, the NRC states that “the proposed clarification is consistent with industry guidelines”. However, the proposed wording could be interpreted to imply that the required “full length examination of 100 percent of the tubing” can only be performed <u>after</u> the new/replacement steam generators are installed in the plant. The more common industry practice of performing the PSI exam on new and/or replacement Steam Generators is prior to installation; typically at the manufacturing facility prior to shipment or after receipt on-site but prior to installation.</p> <p>The new proposed NRC condition is <u>more restrictive than the current Industry Guideline</u>, EPRI SGMP PWR Steam Generator Examination Guidelines (Revision 7), which states: “The PSI shall be performed <u>after tube installation for replacement SGs</u> or after field hydrostatic tests for new plants, but in both cases, prior to initial power operation to provide a definitive baseline record against which future in-service inspections can be compared.”</p> <p>ASME recommends that the proposed condition be revised to clarify that preservice examinations of steam generator tubing may be performed in the shop after tube installation and shop hydrotesting, prior to installation in the plant.</p>

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<b><i>§50.55a(b)(2)(xxxii)</i></b>	N/A	(xxxii) <i>Section XI condition:</i> Summary report submittal. When using ASME BPV Code, Section XI, 2010 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(ii) of this section, Summary Reports described in IWA-6000 must be submitted to the NRC. Preservice inspection summary reports shall be submitted prior to the date of placement of the unit into commercial service and inservice inspection summary reports shall be submitted within 90 calendar days of the completion of each refueling outage.	<i>ASME recommends that this condition specifically reference paragraph IWA-6240 where the report submittal provisions are stated in Section XI.</i>
<b><i>§50.55a(b)(2)(xxxiii)</i></b>	N/A	(xxxiii) <i>Section XI condition:</i> Risk-Informed allowable pressure. The use of Paragraph G-2216 in Appendix G in the 2011 Addenda and later editions and addenda of the ASME BPV Code, Section XI is prohibited.	<i>In lieu of prohibiting the use of G-2216, ASME recommends that the NRC consider amending this proposed condition to allow the use of Paragraph G-2216 in the 2011 Addenda and later editions and addenda, provided the licensee obtains prior approval by the NRC of the methodology and results. This condition could also be revised to require that licensees demonstrate that no surface breaking flaws exist within the IWB-2500 examination volumes for the Reactor Pressure Vessel beltline region.</i>
<b><i>§50.55a(b)(2)(xxxiv)</i></b>	N/A	(xxxiv) <i>Section XI condition:</i> Disposition of flaws in Class 3 components. When using the 2013 Edition of the ASME BPV Code, Section XI, to disposition flaws in Examination Category D-A components (i.e., welded attachments for vessels, piping, pumps, and valves), the acceptance standards of IWD-3510 must be used.	ASME thanks the NRC for identifying a typographical error in the code. <i>Because ASME has addressed this by errata (Record #14-776), ASME requests that this condition be removed as the condition is no longer necessary.</i>
<b><i>§50.55a(b)(2)(xxxvii)(D)</i></b>		(D) Instead of Paragraph 1(c)(1)(-c)(-2), licensees shall use a phased array search unit with a center frequency of 500 kHz.	<i>ASME recommends that some tolerance (e.g., +/- 20% to +/- 30%) on the center frequency of 500 kHz be included in this condition.</i>



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§50.55a(b)(3)(ii)	(ii) <i>OM condition: Motor-Operated Valve (MOV) testing.</i> Licensees must comply with the provisions for MOV testing in OM Code ISTC 4.2, 1995 Edition with the 1996 and 1997 Addenda, or ISTC-3500, 1998 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(iv) of this section, and must establish a program to ensure that motor-operated valves continue to be capable of performing their design basis safety functions.	(ii) <i>OM condition: Motor-Operated Valve (MOV) testing.</i> Licensees must comply with the provisions for testing MOVs in OM Code, ISTC 4.2, 1995 Edition with the 1996 and 1997 Addenda, or ISTC-3500, 1998 Edition through the latest edition and addenda incorporated by reference in paragraph (a)(1)(iv) of this section, and must establish a program to ensure that MOVs continue to be capable of performing their design basis safety functions. Licensees implementing OM Code, Mandatory Appendix III, “Preservice and Inservice Testing of Active Electric Motor Operated Valve Assemblies in Light-Water Reactor Power Plants,” of the 2009 Edition, 2011 Addenda, and 2012 Edition shall comply with the following conditions:	The proposed revision to this condition requires implementation of Mandatory Appendix III for MOV Inservice Testing and effectively codifies existing NRC Generic Letter 96-05 requirements. This change is expected to add additional IST Active MOVs into a licensee’s MOV Diagnostic Test Program, depending on the plant. This change will result in less flexibility with waiving as-found MOV IST diagnostic testing since MOV diagnostic testing becomes the De Facto MOV IST surveillance test of record. While this change will introduce additional burden, it is expected and is not a change from that approved under ASME OM Appendix III.
<b>§50.55a(b)(3)(ii)(A)</b>	N/A	(A) MOV diagnostic test interval. Licensees shall evaluate the adequacy of the diagnostic test interval for each MOV and adjust the interval as necessary, but not later than 5 years or three refueling outages (whichever is longer) from initial implementation of OM Code, Appendix III.	Most plants under their existing GL96-05 MOV Programs have already justifiably extended MOV inservice test intervals out beyond 5 years, with many plants extending the test intervals as far as 10 years (the Maximum interval approved by Appendix III). This extension is supported by existing GL96-05 MOV programs. The requirement to reevaluate all valves within 5 years of Appendix III implementation will pose additional Appendix III burden since many of these valves will not be due for another test for up to five years beyond the 5 year due date stipulated by the NRC provision.  <i>ASME requests that the NRC clarify whether this condition is intended to require those plants to limit their existing (mature program) test intervals to the 5 Year/3 Refueling Outage maximum at the time of implementing Appendix III until “sufficient data exist” to justify longer test intervals?</i>
<b>§50.55a(b)(3)(ii)(B)</b>	N/A	(B) MOV testing impact on risk. Licensees shall ensure that the potential increase in core damage frequency and large early release frequency associated with the extension is acceptably small when extending exercise test intervals for high risk MOVs beyond a quarterly frequency.	<i>ASME supports this condition and believes that it is appropriate to include and establish specific CDF/LERF criteria.</i>

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<b><i>§50.55a(b)(3)(ii)(C)</i></b>	N/A	(C) MOV risk categorization. When applying Appendix III to the OM Code, licensees shall categorize MOVs according to their safety significance using the methodology described in ASME OM Code Case OMN-3, “Requirements for Safety Significance Categorization of Components Using Risk Insights for Inservice Testing of LWR Power Plants,” subject to the conditions applicable to OMN-3 which are set forth in Regulatory Guide 1.192, or using an MOV risk ranking methodology accepted by the NRC on a plant-specific or industry-wide basis in accordance with the conditions in the applicable safety evaluation.	<p>For existing plants with mature MOV Programs the periodic verification test intervals are typically established using the JOG matrix. This method involves binning each MOV into one of 3 risk categories (High, Medium and Low). Based on the current guidance in Appendix III as well as RG 1.192, existing plants are planning to continue their use of the JOG matrix for test scheduling, along with the existing 3 risk categories. Plants would utilize a separate risk categorization method with only two categories, High and Low, for the purposes of establishing intervals for the Appendix III Exercise testing.</p> <p><i>ASME requests that the NRC clarify whether the intent of this condition is to require that existing plants utilize only the 2 risk categories (High and Low) when establishing the periodic verification (inservice) test intervals per the JOG matrix.</i></p>
<b><i>§50.55a(b)(3)(ii)(D)</i></b>	N/A	(D) MOV stroke time. When applying Paragraph III-3600, “MOV Exercising Requirements,” of Appendix III to the OM Code, licensees shall verify that the stroke time of the MOV satisfies the assumptions in the plant safety analyses.	<p>ASME does not agree with the NRC adding stroke time of AC MOV as an IST requirement. Understand that some MOVs may have Technical Specification or Design Bases values but, these can be addressed either during the MOV Diagnostic testing or other Technical Specifications.</p> <p>This condition should not be a major issue as long as the facilities are not required to stroke time the MOV per the requirements of ISTC.</p> <p>One of the advantages of implementing Appendix III is the elimination of stroke time testing. A basic precept of OMN-1 and Appendix III is that stroke time testing is ineffective as a means to assess MOV condition or identify degradation. For MOVs which have a specific design basis stroke time requirement, such as a value identified in Technical Specifications, it is expected that plants will still implement a stroke time test at some interval. Such a test would be a surveillance test, outside the IST Program. For MOVs without such a specific stroke time requirement, Appendix III implementation was expected to eliminate any stroke time testing.</p> <p>One of the major reasons for why Appendix III was approved to become a part of the ASME OM Code was that the stroke timing of MOVs provided minimal benefit to the detection and monitoring of degradation, especially AC MOVs, and the diagnostic testing performed by the MOV Program was the best way to test/evaluate MOVs. The diagnostic test, which may also be utilized to determine a stroke time, is sufficient to ensure a reliable valve from diagnostic test to diagnostic test. There are years of data to support this conclusion.</p> <p><i>ASME requests that this proposed condition be removed from the final rule. If this condition is not removed, ASME requests that the NRC clarify whether it is the intent of this condition to require that all MOVs will still require stroke time testing? If so, what criteria would be applied to such testing and how often would it have to be performed?</i></p>

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<b><i>§50.55a(b)(3)(iii)(A)</i></b>	N/A	(A) Power-operated valves. Licensees shall periodically verify the capability of power-operated valves to perform their design-basis safety functions.	ASME is concerned about this condition requiring design bases verification on all POVs. Perhaps this condition could be revised to require verification of the POV ability to perform the OM Code specified IST safety function would be more appropriate since many SOVs, HOVs and such do not have methods developed, other than OM Code, to determine “operational readiness” at this time. The OM Code is looking at establishing and identifying methods for these types of valves in the future but, there does not appear to be an “industry-wide concern” identified as of yet, regarding the necessity of being able to periodically verify design bases for these types of valve/actuators, as identified for MOVs and AOVs.
<b><i>§50.55a(b)(3)(iii)(C)</i></b>	N/A	(C) Flow-induced vibration. Licensees shall monitor flow-induced vibration from hydrodynamic loads and acoustic resonance during preservice testing and inservice testing to identify potential adverse flow effects on components within the scope of the IST program.	ASME is not sure whether this condition will provide any improved method for detecting and monitoring for degradation of the valve by the use of IST. There presently is no guidance regarding this in the OM Code and there does not appear to be a need. A more sound and readily available recommendation may be to provide an evaluation of any flow induced vibration during the pre-service test period and/or the post maintenance test period, if the applicable flow induced vibration is identified during this period of time. Perhaps then a test or method (outside of the IST scope) could be determined and included during the PMT.
<b><i>§50.55a(b)(3)(iii)(D)</i></b>	N/A	(D) High risk non-safety systems. Licensees shall assess the operational readiness of pumps, valves, and dynamic restraints within the scope of the Regulatory Treatment of Non-Safety Systems for applicable reactor designs.	ASME is concerned that this condition could be a significant burden on new reactors and maybe not justified. OM is working on a non-mandatory appendix/standard, which may provide guidance to which the NRC could reference for plants setting up an RTNSS Test Program or, a recommendation would be to transition to 10 CFR 50.69 in order to perform more “actual” risk informed IST and therefore provide for a more uniform and proven method for testing RTNSS components as applicable to the risk associated with the failure of the component.  <i>ASME does not support the proposed condition and requests that this proposed condition be removed from the final rule.</i>

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§50.55a(b)(3)(iv)	(iv) <i>OM condition: Check valves (Appendix II).</i> Licensees applying Appendix II, "Check Valve Condition Monitoring Program," of the OM Code, 1995 Edition with the 1996 and 1997 Addenda, must satisfy the requirements of (b)(3)(iv)(A) through (C) of this section. Licensees applying Appendix II, 1998 Edition through the 2002 Addenda, must satisfy the requirements of (b)(3)(iv)(A), (B), and (D) of this section.	(iv) <i>OM condition: Check valves (Appendix II).</i> Appendix II, "Check Valve Condition Monitoring Program," of the OM Code, 2003 Addenda through the 2012 Edition, is acceptable for use without conditions with the clarifications that (1) the maximum test interval allowed by Appendix II for individual check valves in a group of two valves or more must be supported by periodic testing of a sample of check valves in the group during the allowed interval and (2) the periodic testing plan must be designed to test each valve of a group at approximate equal intervals not to exceed the maximum requirement interval. Licensees applying Appendix II of the OM Code, 1995 Edition with the 1996 and 1997 Addenda, shall satisfy the requirements of paragraphs (b)(3)(iv)(A) through (C) of this section. Licensees applying Appendix II, 1998 Edition through the 2012 Edition, shall satisfy the requirements of paragraphs (b)(3)(iv)(A), (B), and (D) of this section.	<p>Comment 1:</p> <p>ASME does not agree with including the 2004 edition thru the 2012 edition as a condition since the changes required by the regulators regarding Check Valve Condition Monitoring has been incorporated into the Subsection ISTC, Mandatory Appendix II for CV CMP approved and incorporated by reference into 10 CFR50.55a, with the 2001 Edition/2003 addenda and later.</p> <p>Through this proposed condition, it appears that the NRC is interpreting the ASME OM Code in a manner inconsistent with its intent. The NRC is encouraged to seek clarifications through ASME's inquiry or revision process. Also, ASME record #14-12 has already addressed these concerns, so the NRC should withdraw these "clarifications".</p> <p>This statement is confusing and may contradict other sections of 10CFR50.55a. For instance, per 10CFR50.55a(f)(4)(ii), for successive 120-month intervals, licensees are required to update to the requirements of the latest edition and addenda of the OM Code incorporated by reference in paragraph (a)(1)(iv) of this section 12 months before the start of the 120-month interval. However, the draft rulemaking implies that the licensee would have to update to a later edition and addenda of Appendix II of the OM Code every time the NRC incorporates later editions and addenda of the code. ASME requests that the NRC clarify whether this is the intent of this condition.</p> <p><i>ASME requests that this condition be modified such that it does not apply to the 2004 Edition through the 2012 Edition.</i></p>
<b>§50.55a(b)(3)(vii)</b>	N/A	(vii) <i>OM condition: Subsection ISTB.</i> Subsection ISTB, 2011 Addenda, is prohibited for use.	The proposed draft rulemaking background information should be clarified that it was not an oversight that the pump periodic verification test was not added to the 2011 addenda of the ASME OM Code. The revised upper limit for the comprehensive pump test was ultimately a separate ballot from the pump periodic verification test. The revised upper limit was approved by BNCS ballot 10-1356, which was closed on 7-14-10. This revision was approved in time to be published in the 2011 addenda. The pump periodic verification test code revision was approved by BNCS ballot #11-2801, in which voting ended on 12-19-11. This approval was obtained in time to be published in the 2012 Edition of the ASME OM Code.

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<i>§50.55a(b)(3)(viii)</i>	N/A	(viii) <i>OM condition: Subsection ISTE.</i> Licensees may not implement the risk-informed approach for inservice testing (IST) of pumps and valves specified in Subsection ISTE, “Risk-Informed Inservice Testing of Components in Light-Water Reactor Nuclear Power Plants,” in the OM Code, 2009 Edition, 2011 Addenda, or 2012 Edition, without first obtaining NRC authorization to use Subsection ISTE as an alternative to the applicable IST requirements in the OM Code pursuant to § 50.55a(z).	ASME Subsection ISTE is working to resolve NRC concerns so that endorsement of Subsection ISTE may be possible in the near future.
<i>§50.55a(b)(3)(x)</i>	N/A	(x) <i>OM condition: ASME OM Code Case OMN-20.</i> Licensees may implement ASME OM Code Case OMN-20, “Inservice Test Frequency,” which is incorporated by reference in paragraph (a)(1)(iii)(E) of this section.	ASME strongly supports the endorsement of OM Code Case OMN-20 as it provides a resolution to the TIA issue identified regarding the use of Tech Spec Sections 3.0.2 regarding “Grace period”.
<i>§50.55a(b)(3)(xi)</i>	N/A	(xi) <i>OM condition: Valve Position Indication.</i> When implementing ASME OM Code, Subsection ISTC-3700, “Position Verification Testing,” 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.	ASME offers the following comments on this proposed condition: Comment 1: This is a new concern associated with the potential “stem to disk separation” of IST valves. The major burden here is the “shall statement” regarding the implementation of supplemental methods to verify obturator position and movement. The ASME Subsection ISTC, is working to change the code to alleviate the regulatory concern associated with the determination of obturator position or movement using ONLY stem position, especially in harsh or corrosive environments. Comment 2: The background information for the proposed rule indicates that this is only a “clarification of the intent of the existing ASME OM Code”. ASME does not agree with this statement and believes that the statement is misleading and incorrect. The NRC is encouraged to seek clarifications through ASME’s inquiry or revision process. The existing code does not require supplemental indications to be performed with all position indication testing. This was confirmed through ASME OM Code Interpretation 12-01, which is consistent with how the industry approaches this testing. This NRC “clarification” of the code would result in a very significant new requirement for licensees. Finally, based on the NRC’s Backfit Rule, this “clarification” appears to be a new or different regulatory position that would require a backfit analysis. Comment 3:

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			<p>To impose this condition on every IST component with a position indication test would be overly burdensome to the licensees with little to no benefit in return. Reviewing one plant’s program resulted in 214 components that require a position indication test. In order to implement this proposal, a total of 428 valve positions (214 open and 214 closed) would have to be validated through other supplementary methods every 2 years. Implementing this proposal would take the licensee several months in order to research the proper test methods, revise procedures, schedule the new testing, and submit new relief requests, as necessary. The additional testing requirements may lengthen the licensee’s outage durations and increase personnel dose. The initial and follow-up costs to implement this proposal would be very significant throughout the entire life of the plant. With this in mind, no studies have concluded that imposing this additional testing would result in any safety benefits in return. On the contrary, however, an extensive study of MOV failure data over the last 30 years, performed by the MOV subgroup, concluded that disc/stem separation events are rare and occur approximately only once per year throughout the industry. Of these failures, 80-90% of them were identified at or near the time of failure under normal plant processes and procedures. Reference the white paper for ASME code change record 14-877. Therefore, ASME does not understand the justification for imposing this new condition.</p> <p>Comment 4:</p> <p>ASME understands that the root cause of the Browns Ferry stem to disc separation event was a manufacturer’s defect resulting in undersized disc skirt threads at disc connection. Based on this, why has such an emphasis been placed on the OM Code and doing more testing? Once plants confirmed that they did not have this manufacturer’s defect with their valves, the issue could have been closed. If the NRC is still concerned about these very rare disc/stem separation events, shouldn’t the focus be on the preventative maintenance process? For instance, the preventative maintenance performed on the more susceptible components (i.e. possibly raw water applications) may need to be reviewed to ensure the right activities at the right frequency are being performed. The proposal to perform this supplemental testing for all position indication tests will not prevent this from happening in the future and most likely will not be the mechanism that identifies the issue. More studies need to be done and any changes that are to be made, if any, should be made through the ASME consensus process. Immediate action at this time is not necessary.</p> <p>Comment 5:</p> <p>The wording in the current OM Code uses the word “should” versus “shall”. Because the word “should” is used, the industry has interpreted the requirement to use supplemental means other than local observation of valve stem movement</p>

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			<p>as voluntary. However, with the proposed NRC change to “shall” the use of supplemental means becomes a requirement. cursory site by site reviews of valves subject to position verification testing (PVT) show that over 70% of the valves have some sort of currently available supplemental hydraulic indicator for the open position and the closed position. To implement this new requirement, all IST valves subject to PVT must be rigorously evaluated for the adequacy of currently available supplemental means, and new tests or examinations must be created in cases where there are none. The number of valves varies from site to site from the low 400s to over 500 valves. Also, a frequently used hydraulic indicator for the closed position is the Appendix J leakage test, which is conducted on intervals of up to five years. The PVT is required every two years. Requiring a leak test currently performed once every five years to be performed once every two years is an added burden. The impact of this change is significant in terms of evaluating currently available supplemental means, creating new supplemental means and increase frequency of testing.</p> <p><i>For the reasons detailed above, ASME requests that the NRC remove this proposed condition from the final rule.</i></p>
§50.55a(f)(4)	<p><i>(4) Inservice testing standards requirement for operating plants.</i> Throughout the service life of a boiling or pressurized water-cooled nuclear power facility, pumps and valves that are classified as ASME Code Class 1, Class 2, and Class 3 must meet the inservice test requirements (except design and access provisions) set forth in the ASME OM Code and addenda that become effective subsequent to editions and addenda specified in paragraphs (f)(2) and (3) of this section and that are incorporated by reference in paragraph (a)(1)(iv) of this section, to the extent practical within the limitations of design, geometry, and materials of construction of the components.</p>	<p><i>(4) Inservice testing standards requirement for operating plants.</i> Throughout the service life of a boiling or pressurized water-cooled nuclear power facility, pumps and valves that are within the scope of the ASME OM Code must meet the inservice test requirements (except design and access provisions) set forth in the ASME OM Code and addenda that become effective subsequent to editions and addenda specified in paragraphs (f)(2) and (3) of this section and that are incorporated by reference in paragraph (a)(1)(iv) of this section, to the extent practical within the limitations of design, geometry, and materials of construction of the components.</p>	<p>It is unclear whether the removal of “ASME Code Class 1, Class 2, and Class 3” from this paragraph is intended to expand the scope of this paragraph to also apply to components other than Class 1, 2, or 3. ASME requests that the NRC clarify that the proposed change is not intended to expand the scope of this paragraph to include pumps and valves other than Class 1, 2, or 3. Expanding the scope of this paragraph would have a significant impact on Licensees. Components other than class 1, 2, and 3 that meet the scope of ISTA-1100 or have been given some safety significance by the plant have typically been treated as Augmented IST by Owners or have been tested in a manner (outside of the IST program) that is commensurate with their safety function. Increasing the scope of this paragraph would require licensees to perform some or all of the following:</p> <ul style="list-style-type: none"> <li>• re-evaluate the scope of the components subject to OM Code requirements</li> <li>• Update IST Program documents and procedures</li> <li>• Seek relief for components that cannot fully comply with these new requirements</li> </ul> <p>ASME believes that a backfit analysis would be required if the scope of this paragraph is extended to include components other than Class 1, 2, and 3.</p> <p><i>ASME recommends that this condition be revised to clarify that it applies only to Class 1, 2, and 3 components.</i></p>

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<b><i>§50.55a(g)(2)(i)</i></b>	N/A	<i>(i) Accessibility requirements for plants with CPs issued between 1971 and 1974. For a boiling or pressurized water-cooled nuclear power facility whose construction permit was issued on or after January 1, 1971, but before July 1, 1974, components that are classified as ASME Code Class 1 and Class 2 and supports for components that are classified as ASME Code Class 1 and Class 2 must be designed and be provided with the access necessary to perform the required preservice and inservice examinations set forth in editions and addenda of Section III or Section XI of the ASME BPV Code incorporated by reference in paragraph (a)(1) of this section (or the optional ASME Code Cases listed in NRC Regulatory Guide 1.147, as incorporated by reference in paragraph (a)(3)(ii) of this section) in effect 6 months before the date of issuance of the construction permit.</i>	<p>For plants whose construction permit was issued on or after January 1, 1971, but before July 1, 1974, this provision applies only to components affected by repair/replacement activities. As such, the provision in §50.55a(g)(2)(i) is not necessary because ASME Section XI specifies requirements for Owners to provide component accessibility for examinations and tests.</p> <p><i>ASME recommends that the proposed requirement of §50.55a(g)(2)(i) be removed. Alternatively, this requirement could be revised to clarify that it applies only to design and access of components affected by repair/replacement activities. If it is the intent of this revised condition to apply retroactively to plants that are already constructed, then ASME believes that the proposed change should be evaluated as a backfit.</i></p>
<b><i>§50.55a(g)(2)(ii)</i></b>	N/A	<i>(ii) Accessibility requirements for plants with CPs issued after 1974. For a boiling or pressurized water-cooled nuclear power facility, whose construction permit under this part, or design certification, design approval, combined license, or manufacturing license under part 52 of this chapter, was issued on or after July 1, 1974, components that are classified as ASME Code Class 1, Class 2, and Class 3 and supports for components that are classified as ASME Code Class 1, Class 2, and Class 3 must be designed and provided with the access necessary to perform the required preservice and inservice examinations set forth in editions and addenda of Section III or Section XI of the ASME BPV Code incorporated by reference in paragraph (a)(1) of this section (or the optional ASME Code Cases listed in NRC Regulatory Guide 1.147, as incorporated by reference in paragraph (a)(3)(ii) of this section) applied to the construction of the particular component.</i>	<p>For plants whose construction permit was issued after July 1, 1974, but before the effective date of this final rule, this provision will apply only to components affected by repair/replacement activities. As such, the provision in §50.55a(g)(2)(ii) is not necessary for these plants because ASME Section XI specifies requirements for Owners to provide component accessibility for examinations and tests.</p> <p><i>ASME recommends that the proposed requirement of §50.55a(g)(2)(ii) be removed. Alternatively, this requirement could be revised to clarify that it applies only to design and access of components affected by repair/replacement activities. If it is the intent of this revised condition to apply retroactively to plants that are already constructed, then ASME believes that the proposed change should be evaluated as a backfit.</i></p>



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§50.55a(g)(3)(i)	<i>(i) ISI design and accessibility requirements: Class 1 components and supports.</i> Components (including supports) that are classified as ASME Code Class 1 must be designed and be provided with access to enable the performance of inservice examination of these components and must meet the preservice examination requirements set forth in the editions and addenda of Section III or Section XI of the ASME BPV Code incorporated by reference in paragraph (a)(1) of this section (or the optional ASME Code Cases listed in NRC Regulatory Guide 1.147, Revision 17, that are incorporated by reference in paragraph (a)(3)(ii) of this section) applied to the construction of the particular component.	<i>(i) Preservice examination requirements for plants with CPs issued between 1971 and 1974.</i> For a boiling or pressurized water-cooled nuclear power facility whose construction permit was issued on or after January 1, 1971, but before July 1, 1974, components that are classified as ASME Code Class 1 and Class 2 and supports for components that are classified as ASME Code Class 1 and Class 2 must meet the preservice examination requirements set forth in editions and addenda of Section III or Section XI of the ASME BPV Code incorporated by reference in paragraph (a)(1) of this section (or the optional ASME Code Cases listed in NRC Regulatory Guide 1.147, as incorporated by reference in paragraph (a)(3)(ii) of this section) in effect 6 months before the date of issuance of the construction permit.	For plants whose construction permit was issued on or after January 1, 1971, but before July 1, 1974, this provision applies only to components affected by repair/replacement activities. As such, the provision in §50.55a(g)(3)(i) is not necessary because ASME Section XI already specifies requirements for performing preservice inspection.  <i>ASME recommends that condition §50.55a(g)(3)(i) be removed from the final rule.</i>
§50.55a(g)(3)(ii)	<i>(ii) ISI design and accessibility requirements: Class 2 and 3 components and supports.</i> Components that are classified as ASME Code Class 2 and Class 3 and supports for components that are classified as ASME Code Class 1, Class 2, and Class 3 must be designed and provided with access to enable the performance of inservice examination of these components and must meet the preservice examination requirements set forth in the editions and addenda of Section XI of the ASME BPV Code incorporated by reference in paragraph (a)(1)(ii) of this section (or the optional ASME Code Cases listed in NRC Regulatory Guide 1.147, Revision 17, that are incorporated by reference in paragraph (a)(3)(ii) of this section) applied to the construction of the particular component.	<i>(ii) Preservice examination requirements for plants with CPs issued after 1974.</i> For a boiling or pressurized water-cooled nuclear power facility, whose construction permit under this part, or design certification, design approval, combined license, or manufacturing license under part 52 of this chapter, was issued on or after July 1, 1974, components that are classified as ASME Code Class 1, Class 2, and Class 3 and supports for components that are classified as ASME Code Class 1, Class 2, and Class 3 must meet the preservice examination requirements set forth in the editions and addenda of Section III or Section XI of the ASME BPV Code incorporated by reference in paragraph (a)(1) of this section (or the optional ASME Code Cases listed in NRC Regulatory Guide 1.147, as incorporated by reference in paragraph (a)(3)(ii) of this section) applied to the construction of the particular component.	For plants whose construction permit was issued after July 1, 1974, but before the effective date of this final rule, this provision will apply only to components affected by repair/replacement activities. As such, the provision in §50.55a(g)(3)(ii) is not necessary for these plants because ASME Section XI already specifies requirements for performing preservice inspection.  <i>ASME recommends that condition §50.55a(g)(3)(ii) be removed from the final rule.</i>
§50.55a(g)(4)(ii)	<i>(ii) Applicable ISI Code: Successive 120-month intervals.</i> Inservice examination of components and system pressure tests conducted during successive 120-month inspection intervals must comply with the requirements of the latest edition and addenda of the Code incorporated by reference in paragraph (a) of this section 12 months before the start of the 120-month inspection interval (or the optional ASME	<i>(ii) Applicable ISI Code: Successive 120-month intervals.</i> Inservice examination of components and system pressure tests conducted during successive 120-month inspection intervals must comply with the requirements of the latest edition and addenda of the Code incorporated by reference in paragraph (a) of this section 12 months before the start of the 120-month inspection interval (or the optional ASME Code Cases	It takes at least twelve to eighteen months to perform all of the work necessary to update an ISI or IST program to a newer edition or addenda of Section XI or the O&M Code. Throughout this process of updating, the Licensee will identify areas of the ASME or the O&M Code where alternative requirements are necessary. These alternative requirements or a Code Case that the NRC has not evaluated in Regulatory Guides 1.147 or 1.192 may be unique to that plant. Therefore, the Licensee must submit a request for alternative to the staff for approval prior to use. Due to the complexity of some of these requests, the

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	<p>Code Cases listed in NRC Regulatory Guide 1.147, Revision 17, when using Section XI, or Regulatory Guide 1.192, Revision 1, when using the OM Code, that are incorporated by reference in paragraphs (a)(3)(ii) and (iii) of this section), subject to the conditions listed in paragraph (b) of this section. However, a licensee whose inservice inspection interval commences during the 12 through 18-month period after July 21, 2011, may delay the update of their Appendix VIII program by up to 18 months after July 21, 2011.</p>	<p>listed in NRC Regulatory Guide 1.147, when using Section XI, or NRC Regulatory Guide 1.192, when using the OM Code, as incorporated by reference in paragraphs (a)(3)(ii) and (iii) of this section), subject to the conditions listed in paragraph (b) of this section. However, a licensee whose inservice inspection interval commences during the 12 through 18-month period after July 21, 2011, may delay the update of their Appendix VIII program by up to 18 months after July 21, 2011.</p>	<p>Licensees make every attempt to submit these to meet the NRC expectation of at least twelve months prior to their need date. This is done to ensure that the NRC has sufficient time to review, request additional information and act on a request prior to the need date which may be the first day of the interval. This requires the licensee to start the update process earlier than 12 months prior to the start of the interval. Usually eighteen to twenty four months before the interval start date. This is before the code that will be required in the subject paragraphs is determined. During a time frame that the NRC does not have a rulemaking in process the licensee can move forward with the Code currently referenced in 10 CFR 50.55a. At twenty four months prior to the interval date it is unlikely that a rulemaking can be issued in draft, complete the comment period, and approved final prior to the twelve month requirement. However, the Licensee is still moving forward at risk. If there is a rulemaking in progress, the Licensee must pick a Code using a critical decision process and hope that the rulemaking proceeds as anticipated. Because of the changing rules in the Federal Register it is difficult at best to pick correctly. If a Licensee chooses the later Code in the rulemaking and the rulemaking is not approved in time it can lead to a large effort to develop an alternative that justifies all Code changes. It may not be acceptable to the NRC and the utility must request additional time to go back and redo the update process.</p> <p>If the NRC has a safety concern with a particular Code edition or addenda it specifies limitations in 10 CFR 50.55a that are required to be added by the Licensee if that year is adopted. When the NRC issues rulemaking to adopt a later Code, it is typically to update to a Code edition or addenda that have incorporated acceptable Code cases and interpretations and not to correct a safety concern that has not been addressed in 10 CFR 50.55a. Adopting an older Code that is referenced in 10 CFR 50.55a is not a safety concern because the limitations in 10 CFR 50.55a must be included. Therefore, extending the time period from twelve to twenty four months would not affect safety and would provide the Licensees sufficient time to update their programs in a manner that would support submitting request for alternative to the NRC with sufficient time for review without requiring Licensees to enter critical decision making processes for Code Update.</p> <p><i>For the reasons discussed above, ASME recommends that the proposed condition be revised to require that licensees “comply with the requirements of the latest edition and addenda of the Code incorporated by reference in paragraph (a) of this section 24 months before the start of the 120-month inspection interval.”</i></p> <p><i>ASME recommends that a similar change be made to §50.55a(g)(4)(i).</i></p>

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§50.55a(g)(6)(ii)(D)(4)	(4) By September 1, 2009, ultrasonic examinations must be performed using personnel, procedures, and equipment that have been qualified by blind demonstration on representative mockups using a methodology that meets the conditions specified in paragraphs (g)(6)(ii)(D)(4)(i) through (iv), instead of the qualification requirements of Paragraph –2500 of ASME Code Case N–729–1. References herein to Section XI, Appendix VIII, must be to the 2004 Edition with no addenda of the ASME BPV Code.	(4) <i>Surface exam acceptance criteria</i> : In addition to the requirements of paragraph -3132.1(b) of ASME BPV Code Case N-729-4, a component whose surface examination detects rounded indications greater than allowed in Paragraph NB-5352 in size on the partial-penetration or associated fillet weld shall be classified as having an unacceptable indication and corrected in accordance with the provisions of paragraph-3132.2 of ASME BPV Code Case N-729-4.	<i>ASME suggests that the applicable Section III Edition and Addenda be specified for Paragraph NB-5352 or that the condition be revised to specify the acceptance criteria to be used.</i>
§50.55a(g)(6)(ii)(F)(1)	(1) Licensees of existing, operating pressurized-water reactors as of July 21, 2011, must implement the requirements of ASME Code Case N–770–1, subject to the conditions specified in paragraphs (g)(6)(ii)(F)(2) through (10) of this section, by the first refueling outage after August 22, 2011.	(1) <i>Implementation</i> : Holders of operating licenses or combined licenses for pressurized-water reactors as of or after [the effective date of the final rule] shall implement the requirements of ASME BPV Code Case N–770–2 instead of ASME BPV Code Case N-770-1, subject to the conditions specified in paragraphs (g)(6)(ii)(F)(2) through (13) of this section, by the first refueling outage starting after [the effective date of the final rule].	ASME offers the following comments and recommendations: <ol style="list-style-type: none"> <li>1. It is impractical for a licensee to meet the requirement for revised code cases if the rule changes a short time period prior to or during a refueling outage.  <i>To address this concern, ASME recommends that the condition be revised to require implementation of the requirements of ASME BPV Code Case N-770-2 “by the first refueling outage starting 18 months following the effective date of the final rule”.</i></li> <li>2. In both Code Cases N-770-1 and N-770-2, the frequency of the volumetric examinations of unmitigated Alloy 82/182 welds operating at cold leg temperatures (= 525 °F (274 °C) and &lt; 580 °F (304 °C)), Inspection Item B, cannot exceed 7 years.  Volumetric examination of cold leg nozzle to safe-end Alloy 82/182 welds involves for some PWR designs either the removal of reactor vessel core barrel, when the examination is performed from the inside surface of weld, or high radiation exposure to the personnel, in case that the volumetric examination is performed from the outside surface of weld.  Per action BC 12-267 ASME approved on April 7, 2013 the Code Case N-770-3 (published in the Supplement 1 to 2010 Edition), where Inspection Items B-1 and B-2 were introduced to replace Inspection Item B of Code Case N-770-2. These two Inspection Items are characterized by the pipe diameter, where B-1 covers pipes less than NPS 14, and B-2 covers pipes greater than or equal to NPS 14. This action changes the inspection frequency for the pipes of NPS 14 and larger, from every 7 years, to every 10 years. This enables the deferral of the examination of Inspection Item B-2 to the end of the interval, in coincidence with the examination of the RPV, and eliminates the need of reactor vessel core</li> </ol>

<b>§50.55a (New Proposed Requirements are denoted by Bold Italics)</b>	<b>Existing §50.55a Regulations (as of 09/17/2015)</b>	<b>Proposed Changes to §50.55a Regulations (Draft Rule)</b>	<b>ASME Comments on §50.55a Regulations - Existing and Proposed Changes</b>
			<p>barrel removal solely for the performance of the volumetric examination of Alloy 82/182 cold leg nozzle to safe-end welds.</p> <p>The technical grounds of this action (PVP2011-57829) are based on that the service experience in the cold leg welds does not justify the enhanced inspections previously required (7 years), and that an interval of 10 years for reexamination of large diameter cold leg Alloy 82/182 locations will provide a more than adequate level of safety and quality. Furthermore, the 10 years interval will reduce hardship on utilities and minimize the risks associated with movement of the reactor vessel core barrel.</p> <p>Furthermore, the NRC has granted relief pursuant to §50.55a(a)(3) or §50.55a(z) to a number of US plants [e.g., Farley Units 1 and 2 (ML14262A317), Indian Point Units 2 and 3 (ML120260090 and ML14199a), and South Texas Project Unit 1 (ML15218A367)] for extending the re-inspection frequency of these welds beyond 7 years.</p> <p><i>ASME recommends that this condition be revised to require use of ASME Code Case N-770-3 or N-770-4, in lieu of N-770-2.</i></p>
§50.55a(g)(6)(ii)(F)(9)	(9) Replace the first two sentences of Extent and Frequency of Examination for Inspection Item D in Table 1 of Code Case N-770-1 with, "Examine all welds no sooner than the third refueling outage and no later than 10 years following stress improvement application." Replace the first two sentences of Note (11)(b)(2) in Code Case N-770-1 with, "The first examination following weld inlay, onlay, weld overlay, or stress improvement for Inspection Items D through K must be performed as specified."	(9) <i>Deferral</i> : Note (11)(b)(1) in ASME BPV Code Case N-770-2 shall not be used to defer the initial inservice examination of optimized weld overlays (i.e., Inspection Item C-2 of ASME BPV Code Case N-770-2).	<p>This condition seems to contradict the condition under 50.55a(g)(6)(ii)(F)(8) which allows the initial inservice examination to be performed between the 3<sup>rd</sup> refueling outage and no later than 10 years after the application. If the overlay is installed at some point within the interval, deferring the initial inservice examination to the end of the interval will be less than 10 years.</p> <p><i>ASME recommends that this condition be clarified to address.</i></p>
<b>§50.55a(g)(6)(ii)(F)(11)</b>	N/A	(11) Cast stainless steel: Examination of ASME Code Class 1 piping and vessel nozzle butt welds involving cast stainless steel materials, shall be performed with Appendix VIII, Supplement 9 qualifications, or qualifications similar to Appendix VIII, Supplement 2 or 10 using cast stainless steel mockups no later than the next scheduled weld examination after January 1, 2020, in accordance with the requirements of paragraph - 2500(a).	<p>Supplement 9 of Appendix VIII in the 2013 Edition is still in course of preparation.</p> <p><i>ASME recommends that this condition be revised to delete reference to Appendix VIII, Supplement 9.</i></p>