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(66FR 40626)



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RULEMAKING AND  
ADJUDICATIONS STAFF

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October 17, 2001

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

**ATTENTION:** Rulemaking and Adjudications Staff

**SUBJECT:** Proposed Rulemaking on 10 CFR 50.55a, *Codes and Standards*  
(66 FR 40626)  
**Public Comment**

**PROJECT NUMBER: 689**

NEI's comments on the proposed modification of the 10 CFR 50.55a, *Codes and Standards* regulation issued by the NRC for public comment on August 3, 2001, are provided as Enclosure 1. These comments developed with input from our utility members.

These comments provide technical bases why most of the proposed limitations or modifications should not be imposed on the cited edition or addenda of the ASME Code. Furthermore, the imposition of these limitations or modifications is contrary to those instances where the NRC has approved use of the same ASME Code provision on a plant specific basis (e.g., Enclosure 1, Table 1, Comments 5, 14, 16 and 20).

In 1989, the NRC Office of General Counsel (OGC) briefed the Committee to Review Generic Requirements (CRGR) on application of the 10 CFR 50.109, *Backfitting* regulation as it applies to revision of 10 CFR 50.55a to adopt new editions and addenda of the ASME Code. Enclosure 2 provides an OGC letter associated with that meeting (PDR Accession Number 9405180406). This letter provides the basis for the NRC staff concluding that routine updates of 10 CFR 50.55a, which incorporate by reference new editions or addenda of the ASME Code, are not subject to the backfit provisions of 10 CFR 50.109. However, the letter clearly states that the NRC imposition of modifications or limitations to referenced editions or addenda of the Code is subject to the backfitting rule. (See the third page of Enclosure 2). It is our understanding that this guidance still applies.

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The *National Technology Transfer Act and Advancement Act of 1995* (Public Law 104-113) requires that Federal agencies use technology developed or adopted by voluntary consensus standard organizations. NRC Directive 6.5, *NRC Participation on Development and Use of Consensus Standards*, and its associated Handbook acknowledges that the NRC reserves the right to apply limitations or modifications when the standard "...does not adequately address a specific regulatory issue, the standard is technically incorrect, or it is inconsistent with current regulations." The proposed rulemaking does not identified which of these conditions were used as the basis for imposing the limitation or modification to the cited ASME Code editions and addenda.

If you have questions please contact Kurt Cozens (202) 739-8085, [koc@nei.org](mailto:koc@nei.org), or me.

Sincerely,



Alexander Marion

c: Stephen Tingen

KOC/  
Enclosures

**ENCLOSURE 1**

**TABLE 1 -- COMMENTS ON PROPOSED 10 CFR 50.55A RULE**

**TABLE 2 -- COMMENTS ON EXISTING REQUIREMENTS OF 10CFR50.55A**

**TABLE 1**  
**COMMENTS ON PROPOSED 10 CFR 50.55A RULE**

COM MENT NUM BER	PARAGRAPH PROPOSED RULE	PARAGRAPH 10 CFR 50.55A	COMMENT	PROPOSED REVISION
1.	2.2	(g)(6)(ii)(B)(1)	<p>If the proposed revision to 10CFR50.55a(g)(6)(ii)(B)(1) is approved, it could have the following unintended consequence:</p> <p>Licensees that established the start date for the first 120-month interval for inservice inspection of Class MC components between September 9, 1996 and September 9, 2001 might now have to change the start date for that 120-month interval if containment examinations did not commence until some time after the start of this interval.</p> <p>For licensees with multiple units and sites, a number of initial IWE examinations may have been scheduled to be performed for the first refueling outage after the interval start date. There is no technical reason why the start date a licensee selected for their inspection interval should now have to be revised, just because containment examinations did not commence on the first day of the inservice inspection interval selected by the licensee.</p> <p>Note that Subsection IWL does not specify 120-month intervals for Class CC component examinations. IWA-2430(j) requires that "the inspection intervals for inservice examinations of Class CC components shall be in accordance with the requirements of IWL-2400."</p> <p>IWL-2410 and IWL-2420 require that examinations of Concrete and Unbonded Post-Tensioning Systems be conducted at 1,3, and 5 years following the completion of the Structural Integrity Test and every 5 years thereafter. Thus, there are no specified 120-month intervals for Class CC examinations. The proposed regulation is not clear as to how licensees are to comply with the provisions of 10CFR50.55a(g)(4)(i) and (ii) or whether these provisions are applicable to Class CC component examinations performed in accordance with Subsection IWL. Clarification is needed to address this issue for Class CC examinations and to provide guidance on how to establish an appropriate start date for Class CC component</p>	<p>10CFR50.55a(g)(6)(ii)(B)(1) should be revised (see underlined) to read as follows:</p> <p>"The start date of the first 120-month interval for inservice inspection of Class MC components <u>shall</u> coincide with the start of the first <u>Class MC</u> containment inspection, <u>or shall be established such that the first 120-month inspection interval ends between September 9, 2006 and September 9, 2008.</u>"</p> <p>Insert a new paragraph 10CFR50.55a(g)(6)(ii)(B)(2) to read as follows:</p> <p>"Licensees shall establish a 120 month interval for inservice inspection of Class CC components for the purpose of complying with 10CFR50.55a(g)(4)(i) and (ii). The start date of the first 120-month interval for inservice inspection of Class CC components shall coincide with the start of the first Class CC containment inspection or shall be established such that the first 120-month inspection interval ends between September 9, 2006 and September 9, 2008."</p> <p>The existing proposed paragraph 10CFR50.55a(g)(6)(ii)(B)(2) should be renumbered.</p>

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			<p>inspection intervals.</p> <p>10CFR50.55a(g)(6)(ii)(B) could be revised without causing undue burden on licensees, and still clarify acceptable start dates for the 120-month inservice inspection intervals for Class MC and Class CC components. The proposed revision will allow licensees with multiple plants and units to establish the same 120-month interval start date for all units, resulting in consistency between these units.</p>	
2.	2.2	(g)(6)(ii)(B)(3)	<p>Section 2.2, "Section XI", addresses the deletion of existing requirements found in 10 CFR 50.55a(g)(6)(ii)(B)(1) through (4).</p> <p>10CFR50.55a(g)(6)(ii)(B)(2) in the existing regulation requires that "The date of the first examination of concrete must be used to determine the 5-year schedule for subsequent examinations subject to the provisions of IWL-2410(c)." This provision was added to the regulation when it was revised in 1999.</p> <p>After the NRC provided clarification on when concrete examinations could be performed during the expedited examination period, some licensees chose to perform initial concrete examinations separately from post-tensioning system examinations. Because 10CFR50.55a(g)(6)(ii)(B)(2) was changed in 1999, those licensees who performed these examinations separately may now be required to maintain these separate schedules for concrete and post-tensioning system examinations after the end of the expedited examination period expires on September 9, 2001. This would be the case if the 24-month examination window for concrete examinations does not overlap or coincide with the 24-month examination window for post-tensioning system examinations.</p> <p>Provided that no longer than 5 years elapse between successive concrete examinations, it should be permissible for an Owner to schedule the next concrete examination (occurring after September 9, 2001) to coincide with the next scheduled post-tensioning system examinations.</p> <p>Because the clarification added in 1999, as addressed above, is proposed to be deleted from 10CFR50.55a(g)(6)(ii)(B)(2), it is unclear how the modified schedule requirement will be maintained. This may be acceptable if it is the intent of the NRC to allow Owners to</p>	<p>10CFR50.55a(g)(6)(ii)(B)(3) should be revised to read:</p> <p>(3) Concrete examinations required by Subsection IWL, Table IWL-2500-1, Category L-A shall comply with the schedule requirements of IWL-2410 after September 9, 2001. Alternatively, if concrete examinations were performed in accordance with Subsection IWL, Table IWL-2500-1, Category L-A between September 9, 1996 and September 9, 2001, the date that these concrete examinations were conducted may be used to determine the 5-year schedule for examinations after September 9, 2001 subject to the provisions of IWL-2410(c).</p>

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			reschedule concrete examinations in accordance with IWL after September 9, 2001. If this interpretation is correct, some licensees may decide to reschedule their concrete examinations to coincide with the next scheduled post-tensioning system examinations. The result would be that no more than 5 years would elapse between successive concrete examinations. If this interpretation is not correct, and the NRC believes that the provisions in the existing 10CFR50.55a(g)(6)(ii)(B)(2) will impact future scheduling of concrete examinations, then a change may be warranted to allow an adjustment to the schedule for concrete examinations performed after September 9, 2001	
3.	2.2.1.1	(b)(2)(viii)(F)	<p>NRC Issue - The revised Code provision does not provide any criteria that the licensee must use when developing IWL personnel qualification requirements.</p> <p>The proposed rule requires that personnel examination containment concrete surfaces and tendon anchorages hardware, wires or strands be qualified to the provisions of IWA-2300. The effort to implement this Code criteria does not result in a corresponding increases in qualify or safety.</p> <p>Although the Code does not address personnel qualification requirements, licensees typically committ to meet the requirements of Regulatory Guide 1.58 or another NRC approved standard, which endorses ANSI N45.2.6, <i>Qualification of Inspection, Examination, and Testing Personnel for Nuclear Plant</i>. This standard addresses requirements for visual acuity, training, and experience. As such, acceptable qualification requirements for examiners are defined.</p> <p>In addition, the later Editions and Addenda of ASME Section XI still state that the Responsible Engineer is responsible for "approval, instruction, and training of concrete examination personnel." Also, these examinations are required to be performed by, or under the direction of, the Responsible Engineer.</p> <p>Performing examinations of concrete structures under the direction of the Responsible Engineer and using examiners certified in accordance with a NRC approved standard (e.g., RG 1.58) provides acceptable levels safety. These controls will ensure the capability and visual acuity of the examiners is sufficient to detect evidence of degradation of the concrete structure.</p>	Delete the proposed rule's modification to 10 CFR 50.55a(b)(2)(viii)(F).

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			As such, amending the regulation to mandate the provisions of IWA-2300 is not warranted and would not provide compensating increases in quality and safety.	
4.	2.2.1.1  2.2.1.3	(b)(2)(viii)(F)  (b)(2)(ix)(G)	<p>The current 10 CFR 50.55a endorsed Editions and Addenda of the ASME Section XI Code require a general visual examination to be performed during the first and second inspection period. A VT-3 examination is only required during the third inspection period. However, the proposed rule would require that the general visual examination meet the requirements for a VT-1 or VT-3 visual examination. This establishes a significant new regulatory position.</p> <p>Mandating the more stringent requirements outlined for a VT-1 or VT-3 visual examination is not necessary for the examination of accessible surface areas of the containment vessel. Applying the more stringent VT-3 distance and illumination requirements to the general visual examinations during the <u>first</u> and <u>second</u> inspection periods is a backfit requiring evaluation under the 10 CFR 50.109 Backfitting rule.</p> <p>The Editions and Addenda of the Code currently endorsed do not define distance and illumination requirements for the general visual examination. Since these endorsed Editions and Addenda of the ASME Section XI Code have been determined to provide an acceptable level of quality and safety, it is unclear why the later Editions and Addenda with the same provisions for general visual examination are not considered acceptable.</p> <p>Corrosion of the metallic surfaces is the primary degradation mechanism of concern for these containment surfaces. Corrosion can easily be detected by a general visual examination method.</p> <p>A VT-1 visual examination, as described in IWA-2211, is to detect discontinuities and imperfections on the surface of components, including such conditions as cracks, wear, corrosion, and erosion. The requirements for this visual examination were primarily written for the examination of components within the reactor coolant pressure boundary (a VT-1 examination is not required for Class 2 and 3 component).</p> <p>The VT-3 visual examination requirements, outlined in IWA-2213, were</p>	Delete the proposed modification or perform a Backfitting analysis justifying the significant change to the existing NRC regulatory positing and the significant change to the ASME Code imposed by the NRC staff.

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			<p>written primarily for detecting flaws in metallic components (e.g., welds, supports). As defined in IWA-2213, a VT-3 visual examination is conducted to determine the general mechanical and structural condition of components and their supports. This examination is accomplished by verifying parameters such as clearances, settings, and physical displacement; and to detect discontinuities and imperfections (e.g., loss of integrity at bolted or welded connections).</p> <p>Mandating the more stringent requirements outlined in IWA-2200 for a VT-1 or VT-3 examination is not warranted for the detection of degradation such as corrosion nor would it provide a compensating increase in quality and safety.</p>	
5.	2.2.1.2	(b)(2)(ix)(F)	<p>NRC Issue - The revised Code provision does not provide any criteria that the licensee must use when developing IWE personnel qualification requirements.</p> <p>Comment - Mandating the provisions of IWA-2300 for the visual examination of containment surfaces would not provide compensating increases in qualify and safety. Although the Code does not address qualification requirements, most licensees are committed to meet the requirements of Regulatory Guide 1.58 or another NRC approved standard for qualification of examiners.</p> <p>For those licensees committed to use Regulatory Guide 1.58, this document endorses ANSI N45.2.6, Qualification of Inspection, Examination, and Testing Personnel for Nuclear Plant. This approved standard addresses requirements for visual acuity, training, and experience. Performing examinations of the containment surfaces using examiners certified in accordance with a NRC approved standard (e.g., RG 1.58) will provide acceptable levels of qualify and safety. As such, acceptable qualification requirements for examiners are defined.</p> <p>In addition, the current regulation endorses Editions and Addenda of the ASME Section XI Code that requires a general visual examination to be performed. These endorsed Editions and Addenda currently do not mandate the requirements of IWA-2300 for the examiners performing the general visual examinations. Since these endorsed Editions and Addenda of the ASME Section XI Code have been determined to provide an acceptable level of quality and safety, it is unclear why the later Editions and Addenda with the same provisions are not considered</p>	Delete the proposed rule's modification to 10 CFR 50.55a(b)(2)(ix)(F).



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			acceptable.	
6.	2.2.1.4	(b)(2)(ix)(H)	Table IWE-2500-1 of the ASME Section XI Code only requires a general visual examination of bolting. The acceptance standard of IWC-3513 is written for flaws detected by the volumetric and the surface examination method. Since IWC-3513 provides no criteria for flaws detected by visual examination, it is unclear how this acceptance criteria provides a compensating increase in quality and safety.	Delete the proposed modification.
7.	2.2.1.4	(b)(2)(ix)(H)	IWC-3513 is an inappropriate reference for this application, as it identifies surface and volumetric examination methods for bolting examination - processes not required for containment vessel bolting. There is no substantive change between the previous wording in IWE-3515.1 (1992 Edition w/1992 Addenda - acknowledged as being acceptable to the Commission due to its current adoption in 10 CFR 50.55a) and the current wording in IWE-3510.3, other than elimination of the impractical bolt-torque or tension test.	Delete the modification.
8.	2.2.2	(b)(2)(ix)(I)(1)	<p>10CFR50.55a(b)(2)(ix)(I)(1) requires that "The general visual examination must include the examination of bolted connections that are disassembled at the time of a scheduled inspection". The term "at the time of a scheduled inspection" may be unclear.</p> <p>For some plants, the general visual examination may be performed over a period of days or weeks. It is possible that examination of a portion of the containment could be completed before a bolted connection is disassembled. In this case, it is unclear as to whether the examination personnel will have to re-examine that portion of the containment where a bolted connection is disassembled, even after the general visual examination of that portion of the containment has been completed, just to ensure that the disassembled connection is examined. Also, licensees could elect to postpone disassembly of bolted connections during the general visual examination to avoid having to specifically schedule the examination of bolted connections during the general visual examination.</p> <p>If it is acceptable to allow bolted connections to be disassembled and examined in accordance with the requirements of 10CFR50.55a(b)(2)(ix)(I)(4) when the general visual examination is not scheduled, it should be acceptable to allow station procedures to verify</p>	<p>10CFR50.55a(b)(2)(ix)(I)(1) should be revised (see underlined) to read as follows:</p> <p>"The general visual examination must include the examination of bolted connections that are disassembled at the time of a scheduled inspection, <u>unless the provisions of 10CFR50.55a(b)(2)(ix)(I)(4) are satisfied when a bolted connection is disassembled prior to reassembly.</u>"</p>

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			<p>the acceptability of bolting materials any time a bolted connection is reassembled. The requirement of 10CFR50.55a(b)(2)(ix)(I)(1) to schedule general visual examinations of bolted connections will require coordination with maintenance planning, causing additional coordination and scheduling challenges.</p> <p>As long as the general visual examination looks at 100% of all bolted connections (assembled or disassembled), and maintenance procedures address inspection of bolting components when a bolted connection is disassembled, it should not be necessary to require that the general visual examination include "the examination of bolted connections that are disassembled at the time of a scheduled inspection".</p>	
9.	2.2.2	(b)(2)(ix)(I)(3)	<p>Two concerns exist with the proposed requirement:</p> <p>First, it should be acceptable to perform an Engineering Evaluation of the degradation or damage. If the condition can be adequately addressed by the Engineering Evaluation, then it should not be necessary to require disassembly of the bolted connection. For many containment bolted connections, there is no internal degradation mechanism that might cause concern for inaccessible surfaces of the bolted connection. For these bolted connections, it may not be warranted to disassemble the connection if the degradation mechanism is caused by external environmental conditions, and the condition can be adequately addressed by an Engineering Evaluation, including Supplemental Examinations (if warranted).</p> <p>Second, for some pressure-unseating bolted connections that are sealed using a dual gasket or dual o-ring configuration, disassembly of the bolted connection would result in a breach of the containment pressure boundary. If the examination that detected the degradation or damage was performed during plant operation, this would necessitate plant shutdown. This would be unnecessary if an Engineering Evaluation could assess the acceptability of the condition, as recommended in the previous comment. Of course, if the Engineering Evaluation was unable to verify the acceptability of the bolted connection, disassembly of the bolted connection and plant shutdown may be necessary.</p>	<p>10CFR50.55a(b)(2)(ix)(I)(3) should be revised (see underlined) to read as follows:</p> <p>"Damaged bolted connections must be disassembled, and a detailed visual examination of the bolted connection components must be performed, <u>unless an Engineering Evaluation has been performed that demonstrates that the bolted connection meets the acceptance standards of IWE-3500 and 10CFR50.55a(b)(2)(ix)(H).</u>"</p>

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10.	2.2.3	(b)(2)(ix)(J)	<p>Ultrasonic examination of a concrete containment liner is an inappropriate requirement, as the function of the liner is to provide a leak-tight membrane. The (reinforced) concrete containment is the load-bearing component. Requiring ultrasonic examination of, and imposing ultrasonic acceptance standards on, containment liners adds no value and results in unnecessary personnel exposure and cost.</p> <p>Appendix J of 10 CFR Part 50 provides tests the leak tightness of containment liner, thereby demonstrating its design function.</p>	Delete the modification.
11.	2.2.4	(b)(2)(xii)(A)	The proposed limitation identifies the Branch Technical Position EMEB 3-1, as the basis for eliminating this exemption. Use of an NRC internal guidance that is not a licensee requirement as the basis for this limitation is an inappropriate NRC action.	Eliminate the NRC's provision.
12.	2.2.4	(b)(2)(xii)(B)	<p>The objective of Code Case N-522 is to reduce redundant testing. Without the use of Code Case N-522, piping that penetrates containment (where the piping adjacent the containment isolation valves are outside the scope of Section XI) receives both Section XI pressure testing and Appendix J testing.</p> <p>The purpose of Section XI pressure testing is to verify leakage integrity of Class 1, 2, &amp; 3 process-piping systems. Section XI pressure testing identifies service-related and age-related degradation in <u>safety</u> systems. The scope of Code Case N-522 is limited to piping that is a portion of a <u>non-safety</u> related system that penetrates the primary reactor containment where the process pipe is Code Class <u>only at the penetration</u> and is provided with isolation valves that are either locked closed during normal operation, capable of automatic closure, or capable of remote closure to support the containment safety function and these components perform no other safety function.</p> <p>The process pipe within the scope of Code Case N-522 is not safety significance. The only safety concern is the breaching of containment. Currently, several plants use Code Case N-522 for the subject piping, initially as an approved relief request prior to its endorsement in Regulatory Guide 1.147 now through its incorporation into Revision 12 of Regulatory Guide 1.147. The SER's for the relief requests and the Regulatory Guide had a proviso that required the Appendix J test to detect and locate through wall leakage, this is not the case with the new addenda and edition of the Code. The new edition and addenda of the Code make the subject piping fully exempt per IWA 5110 (c). It is</p>	Revise rule to allow use of Code Case N-522 without limitations.

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			<p>believed that this full exemption is justified, however, if a limitation is to be imposed, the limitation should still allow the use of Appendix J testing in lieu of Section XI pressure testing with the provisions given in Regulatory Guide 1.147</p> <p>The purpose of Appendix J testing is to ensure containment integrity. The NRC made a comparison in rulemaking Section 2.2.6 that contrasted the differing objectives between the Construction Code and those of Section XI. Just the same, there are differing objectives between Section XI pressure testing and Appendix J testing. With the NRC opposition to the use of Appendix J testing as stated in Code Case N-522, the objectives of Section XI and those of Appendix J have become intertwined and ambiguous.</p> <p>Since there is no safety concern of the process piping system within the scope of Code Case N-522, it is not appropriate to mandate Section XI requirements on these components. It is more appropriate to allow Appendix J to administer any safety testing for the scope of Code Case N-522 components.</p> <p>If the NRC is concerned with the provisions in Appendix J to detect and locate through-wall leakage as they have stated in rulemaking Section 2.2.4; then, consideration should be given to revising the Appendix J test to accommodate such concerns.</p>	
13.	2.2.5	(b)(2)(xviii)(A)	<p>The basis for the 5-year recertification requirement was incorporation of Code Case N-574. The Code Case brought the recertification frequency for Level I and II personnel in line with that of Level III personnel.</p> <p>The NRC does not take exception to Level III personnel recertifying every 5 years. Therefore, it is unclear why the proposed rule holds Level I and II personnel to a tougher standard than Level III personnel.</p> <p>The proposed rule states that proficiency of examination personnel decreases over time. Other than for the ultrasonic method, industry does not have any data that substantiates this claim. For ultrasonic method, the annual training requirements of VII-4240 apply to assure that proficiency is maintained. These requirements, which were contained in the earlier Code editions and addenda, which specified recertification every 3 years, were part of the justification for Code Case N-574 and its incorporation into the code.</p>	Delete the modification.

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			In addition, NDE workforce shortfalls are a significant challenge to the industry. Extending the frequency of recertification for Level I and II personnel to be the same as for Level III personnel will minimize the impact of this concern. If this limitation is retained, the NRC should address the impact that the modification would have on industry.	
14.	2.2.5	(b)(2)(xviii)(B)	<p>The basis for the alternative requirements in IWA-2316 was incorporation of Code Case N-546.</p> <p>The proposed rule is inconsistent with prior NRC positions since the NRC has issued several plant relief requests to use the alternative VT-2 personnel qualification requirements of Code Case N-546. The NRC Safety Evaluation Reports for these relief requests did not stipulate that initial qualification examinations or recertification examinations are to be performed.</p> <p>The ASME Code adopted the alternative requirements because without them the requirements would direct VT-2 examination personnel to be certified in accordance with ANSI/ASNT CP-189 for initial and recertification exams. However, unlike other more rigorous NDE methods, VT-2 is not in the scope of ANSI/ASNT CP-189. To qualify and certify VT-2 personnel in a manner commensurate with the requirements of CP-189 is unnecessary.</p> <p>The Abstract of CP-189 states, "This standard applies to personnel whose specific tasks or jobs require appropriate knowledge of the technical principles underlying nondestructive testing (NDT) methods for which they have responsibilities within the scope of their employment." Unlike the nondestructive testing methods addressed within CP-189, or even VT-1 and VT-3 examination methods, VT-2 examination does not require any special knowledge of technical principals underlying its performance. It is only the straightforward examination for leakage. No special skills or technical training are required in order to observe water dripping from a component or bubbles forming on a joint wetted with leak detection solution. As such, VT-2 examinations should not be considered nondestructive examinations requiring the attending qualification and certification burdens.</p> <p>The IWA-2316 (Code Case N-546) allows those personnel most familiar with the walkdown of plant systems, such as licensed and non-licensed</p>	Delete the modification.

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			operators, local leak rate personnel, system engineers, and inspection and examination personnel to perform VT-2 examinations without formal qualification and certification. The experience, training, and vision test requirements within IWA-2316 ensure that the personnel performing VT-2 examinations are qualified while removing barriers that have previously prevented many experienced plant personnel from performing leakage examination walkdowns.	
15.	2.2.6	50.55a(b)(xix)	Substitution of alternative methods should be allowed for the methods specified in the Construction Code provided they validate the integrity of the entire weld. ASME Section III already provides for the use of UT and Surface Exams (PT/MT) in lieu of RT for certain cases. UT acceptance standards are supplied by Section III. The rule should be changed to specify full volume examination is required when alternative examination methods are used for those specified in the construction code. To disallow the use of Alternative NDE Methods for Repairs/Replacement activities will require owner's to incur costs in time, dollars and radiation exposure that could be reduced by the use of alternatives without a significant change in safety.	Revise the requirement to read as follows:  (xix) Substitution of alternative methods. The provisions in IWA-2240, 1998 Edition through the latest editions and addenda incorporated by reference in paragraph (b)(2) of this section, and IWA-4520(c), 1997 Addenda through the latest editions and addenda incorporated by reference in paragraph (b)(2) of this section, that allow the substitution of alternative examination methods, a combination of methods or newly developed techniques for the methods specified in the Construction Code may <u>be applied provided the examinations validate the integrity of the entire weld and fabrication material with full volume examinations as required by the construction code.</u>
16.	2.2.7	(b)(2)(xx)	The basis for the revision of IWA-5213(a) was the incorporation of Code Case N-498-2. N-498-1 is endorsed in Regulatory Guide 1.147 without any limitation or modification.  Many plants currently use Code Case N-498-1 (RG 1.147), which allows the substitution of system leakage tests (conducted at nominal operating pressure) in lieu of the elevated pressure tests (i.e., hydrostatic testing) at the end of each inspection interval. In revision 1 of the Code Case, hold times of 10 minutes for non-insulated systems and 4 hours for insulated systems are specified for the system leakage test, whereas, in revision 2 no hold times are specified.	Delete the limitation or revise RG 1.147

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			<p>Under the 1989 Edition of Section XI, many plant's current Code of record, the routine pressure tests conducted during the inspection interval are:</p> <ul style="list-style-type: none"> <li>• system leakage tests for the Class 1 boundary,</li> <li>• system functional tests for Class 2 or 3 systems that are not normally in operation, and</li> <li>• system inservice tests for Class 2 or 3 systems that are normally in operation.</li> </ul> <p>The specified hold times for these tests are:</p> <ul style="list-style-type: none"> <li>• none for the system leakage tests,</li> <li>• 10 minutes for the system functional tests, and</li> <li>• basically 4 hours for the system inservice tests.</li> </ul> <p>Thus, under current pressure testing programs, based on Code Editions or Code Cases endorsed by the NRC and except for the end of inspection interval pressure tests, no hold times are required for Class 1 system pressure tests and only 10 minute hold times are required for Class 2 and 3 systems that are not normally in operation.</p> <p>The proposed limitation would impose hold times of 10 minutes for non-insulated systems and 4 hours for insulated systems. This would require for the RPV Leak Test a 4-hour extension for Class 1 systems. This test is typically a critical path activity performed at the end of each refueling outage. The regulatory analysis fails to properly account for the substantial costs of this critical path time in the estimation and evaluation of the values and impacts.</p> <p>For Class 2 or 3 systems normally in operation, 4-hour extensions of the maintenance/test-run window would be required.</p> <p>The results of the proposed rule would be considerable addition refueling outage costs and increase system-out-of-service time, which is counterproductive to Maintenance Rule guidelines.</p> <p>In summary, the proposed limitations will provide for a significant increase in burden with no proven commensurate increase in safety and are inconsistent with existing NRC guidance.</p>	

COM MENT NUM BER	PARAGRAPH PROPOSED RULE	PARAGRAPH 10 CFR 50.55A	COMMENT	PROPOSED REVISION
17.	2.2.8	(b)(2)(xxi)(A)	Examination requirements of Table IWB-2500-1, Examination Category B-D Comment: ASME Code case and code change allowed for the deletion of these examinations on the steam generator and pressurize. ASME had put together a white paper under ISI-optimization. We support the ASME Section XI and their position. The nozzle inner radius has not experience cracking. Performance of this inspection will result un-necessary radiation dose being received by plant personnel.	Delete this paragraph from the rulemaking
18.	2.2.8	(b)(2)(xxi)(B)	<p>Code Case N-547 eliminated the VT-1 examinations of CRD housing bolting when disassembled. The proposed limitation reverses this criterion.</p> <p>The basis for the proposed limitation states that the examination is appropriate prior to reinstallation because bending and galling of threads, and other damage to bolting, can occur when performing maintenance activities that require removal and reinstallation of bolting.</p> <p>Code Case N-547 justified elimination of the CRD bolting exams because service experience has demonstrated that CRD bolting failures/damage has not occurred and that maintenance practices permit re-installation bolting without damage. The existing criterion (Table IWB-2500-1, Item B7.80) does not required examination of the bolting prior to installation. Note 1 of Table IWB-2500-1, Examination Category B-G-2, states that bolting may be examined in place under tension, when the connection is disassembled, or when the bolting is removed. As used under the Extent and Frequency of Examination Column for Item B7.80, "when removed" simply establishes the scope of the CRD bolting exams.</p> <p>Furthermore, because the CRD mechanisms are in high radiation areas, elimination of the bolting examinations would support ALARA considerations. In order to avoid contamination and radiation exposure, VT-1 examination personnel typically examine the bolting when it is removed and remotely located from the CRD mechanism.</p> <p>The proposed limitation is not only considered unwarranted, but fails to accomplish its stated purpose.</p>	Delete the limitation.
19.	2.2.8	(b)(2)(xxi)(C)	The 1997 Addenda and later Editions and Addenda incorporated Code Case N 323-1, which allows single-side surface examination of class RPV support skirt attachment welds. The proposed limitation would not permit use of the Code change and would require licensee to perform surface examination from both sides or a volumetric examination.	Delete the limitation.



COM MENT NUM BER	PARAGRAPH PROPOSED RULE	PARAGRAPH 10 CFR 50.55A	COMMENT	PROPOSED REVISION
			<p>Access to the outside surface of RPV skirt welds is typically possible, but access to the inside surface involves entering a confined, high radiation space under the RPV bottom head. Typically the skirt's inside surface geometry requires surface preparation that is difficult to perform.</p> <p>Code Case N 323-1 was developed and incorporated into the Code because of the component's good service history and difficulty in inspecting the inside surface.</p> <p>Volumetric inspection is an alternate to the surface examination requirement proposed by the limitation. The proposed limitation is incomplete because it does not provide guidance on the qualification of the volumetric inspection criteria. Currently, Appendix VIII of Section XI of the ASME Boiler and pressure Vessel Code does not contain guidance on this qualification. Nor has the industry's Performance Demonstration Limitative defined appropriate guidance.</p> <p>The basis for the proposed limitation states that single-side surface examination is not sufficient because it would not identify flaws that would be identified by a single-sided volumetric examination or a surface examination from both sides of the weld. It is recognized that a surface examination from only the outside surface will not detect flaws that originate from the inside surface, but the types of material involved are very flaw tolerant, with slow flaw propagation, and flaws originating on the inside surface would grow through-wall long before their length would threaten the structural integrity/function of the weld.</p> <p>RPV skirt welds are similar to BWR core shroud circumferential welds in that they are not pressure retaining and their load keeps them in compression. Safety analyses performed by the BWRVIP found that core shroud circumferential welds could be cracked through-wall for 360° and still perform their function. Considering this comparison and the excellent service history of RPV skirt welds, the extra radiation exposure and burden necessary to examine the inside surface of the weld is not warranted.</p>	
20.	2.2.9	(b)(2)(xxii)	The proposed limitation would have licensees use requirements that the NRC determined were inadequate in the previous revision of 10 CFR 50.55a (reference September 22, 1999, 64 FR 51370, paragraph 2.4.1.1.1). The 1999 <i>Federal Register</i> explanation was that the VII-4240 requirements, at that time, did not include any examination of flawed	Delete the limitation.

COM MENT NUM BER	PARAGRAPH PROPOSED RULE	PARAGRAPH 10 CFR 50.55A	COMMENT	PROPOSED REVISION
			<p>specimens.</p> <p>Because the NRC determined these requirements to be inadequate, paragraph (b)(2)(xiv), was added to 10 CFR 50.55a. The current proposed rule does not modify or delete this requirement which requires personnel performing ultrasonic examinations qualified per Appendix VIII receive 8 hours of annual hands-on training with specimens that contain cracks. This training must be completed no earlier than 6 months prior to performing ultrasonic examinations at a Licensees facility.</p> <p>Numerous licensees have been granted relief from the VII-4240 requirements on the basis of substituting the (b)(2)(xiv) requirements. Code Case N-583 and the subsequent revision of VII-4240, that the proposed rule ignores, were written in response to the NRC's previous concern and a desire to minimize the number of licensee relief requests.</p> <p>The basis for the currently proposed limitation states that N-583 (and thus the revised VII-4240) only provides training for techniques associated with data recording capabilities and does not provide for training using manual techniques. This is incorrect. Neither Code Case N-583 nor the revised VII-4240 address training for data recording. Nor do they preclude training using manual techniques. The real purpose, as previously expressed by the NRC and agreed upon by the Code Committee, was for ultrasonic examination personnel to get training/practice on examination of flawed specimens.</p> <p>It is not the ability to push a transducer that erodes with time, but rather the skill to recognize and analyze flaw signals. The revised VII-4240 simply provides the option of practicing with flaw signals through live examination of flawed specimens or through analyzing prerecorded data from flawed specimens.</p> <p>Based on the above, the existing (b)(2)(xiv) should be deleted and there should be no limitations on the use of the revised VII-4240.</p>	
21.	2.2.10	(b)(2)(xxii)	<p>The proposed rule requires a weld qualification for the underwater method using a mockup made from material with similar neutron fluence levels as the production weldment. This is impractical due to unavailability of materials with similar neutron fluence levels. This limitation is inconsistent with the NRC's current efforts (collaborative funding) to develop underwater welding techniques.</p>	Delete the propose modification and implement the recommendations developed in NRC/industry underwater welding initiatives.

COM MENT NUM BER	PARAGRAPH PROPOSED RULE	PARAGRAPH 10 CFR 50.55A	COMMENT	PROPOSED REVISION
			Therefore, the proposed rule's modification is inconsistent with the NRC development efforts. This requirement will negate the NRC and industry efforts, and would effectively eliminate the option of a welded repair for RPV internals.	
22. 1 9	2.3.1	(b)(2)(xv)(A)(2)	This paragraph requires that dissimilar metal welds be examined from the side that is of the same base metal material as that from which qualification was demonstrated. The most representative application and the one PDI intends to qualify, is single-sided with access limited to the safe end side of the weld. However, when a meaningful examination can be conducted from the opposite (e.g., nozzle) side we intend to do so, and take coverage credit if needed, using the examination techniques qualified from the safe end side. The reasoning for this approach is two-fold. First, the composition of the base material is of minor consequence when compared to the effects of the austenitic weld material. Second, the qualification is being conducted from the side of the weld that is most often accessible in the plant.	When implementing Supplement 2 and Supplement 10, examinations must be conducted in two axial and two circumferential directions. Where examination from both sides of the weld is not possible, full coverage credit from a single side may be claimed only after completing a successful single-sided Appendix VIII demonstration using flaws on the opposite side of the weld.  When implementing Supplement 3, examinations must be conducted in two axial directions. When examination in the circumferential direction is required, the circumferential examination must be conducted in two directions, provided access is available. Where examination from both sides is not possible, full coverage credit may be claimed from a single side.
23.	2.3.1	(b)(2)(xv)(C)(1)	The Performance Demonstration Imitative (PDI) does not use paragraph 3.2(c) for sizing qualification, requiring utilities to submit for relief. Eliminating this requirement would aid both the utilities and the regulators from having to either submit, review, or process large numbers of basically generic requests for relief.  Basis - PDI proposes eliminating the use of Supplement 4, Subparagraph 3.2(c), which imposes three statistical parameters for depth sizing. The first parameter, 3.2(c)(1), pertains to the slope of a linear regression line. The linear regression line is the difference between measured versus true value plotted along a through-wall thickness. For Supplement 4 performance demonstrations, a linear regression line of the data is not	Modify rule to eliminate the requirement to use 3.2(C)

COM MENT NUM BER	PARAGRAPH PROPOSED RULE	PARAGRAPH 10 CFR 50.55A	COMMENT	PROPOSED REVISION
			applicable because the performance demonstrations are performed on test specimens with flaws located in the inner 15 percent through-wall. The differences between measured versus true value produce a tight grouping of results, which resemble a shotgun pattern. The slope of a regression line from such data is extremely sensitive to small variations, thus making the parameter of Subparagraph 3.2(c)(1) a poor and inappropriate acceptance criterion. The second parameter, 3.2(c)(2), pertains to the mean deviation of flaw depth. The value used in the Code is too lax with respect to evaluating flaw depths within the inner 15 percent of wall thickness. Therefore, PDI proposes to use the more appropriate criterion of 0.15 inch RMS of 10 CFR 50.55a(b)(2)(xv)(C)(1), which modifies Subparagraph 3.2(a), as the acceptance criterion. The third parameter, 3.2(c)(3), pertains to a correlation coefficient. The value of the correlation coefficient in Subparagraph 3.2(c)(3) is inappropriate for this application since it is based on the linear regression from Subparagraph 3.2(c)(1).	
24.	2.4	(b)(3)(vi)	<p>The proposed modification in 10 CFR 50.55a(b)(3)(vi) would require an exercise interval of 2 years for manual valves within the scope of the ASME OM Code in lieu of the exercise interval of 5 years specified by the ASME OM Code.</p> <p>Previously, the 1998 Edition of the ASME OM Code (and previous Code editions and addenda) specified an exercise interval of 3 months for manual valves within the scope of the Code (which was a recognized unnecessary burden on utilities). The 1999 Addenda to the ASME OM Code revised ISTC- 3540 to extend the exercise frequency for manual valves to 5 years, provided that adverse conditions do not require more frequent testing.</p> <p>This is a significant departure from the ASME Code and, as such, the NRC should perform a backfitting analysis in accordance with the provisions of 10 CFR 50.109 prior to negating the consensus process of the ASME Code. This is consistent with the guidance proved by the NRC's Office of General Counsel in its March 15, 1989, a memorandum (Assession Number 9405180406).</p>	Delete the proposed modification or conduct a backfitting analysis per the provisions of 10 CFR 50.109 to justify the imposition of the proposed modification.
25.	3.	(2)(viii)(F)	The seventh paragraph of Section 3 (labeled <i>Paragraph (2)(viii)(F)</i> ) incorrectly refers to IWE-2310 (d). The correct reference should be IWL-	Correct the paragraph reference..

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			2310 (d), as noted in the proposed rule on page 40638 of the Federal Register Notice.	
26.	3.	(b)(3)(ii)	<p>The proposed revision extends the modification to MOV stroke-time testing requirements to the 1997 Addenda, the 1998 Edition, the 1999 Addenda, and the 2000 Addenda of the ASME OM Code. It reconciles the subsections of the ASME OM Code that were renumbered in the 1998 Edition.</p> <p>Licensees using this edition and these addenda would be required to establish a program to ensure that MOVs continue to be capable of performing their design basis safety functions (combining GL 96-05 and ASME OM Code, ISTC requirements). This action is precedent for the NRC eventually eliminating valve stroke time as a valid test method for AC MOVs.</p>	Revise (b)(3)(ii) as described in the comment..
27.	4.	(g)(4)(i)  (g)(4)(ii)	<p>The proposed rule added a number of limitations and modifications to the proposed rule to address concerns related to requirements of the 1998 Edition through the 2000 Addenda of ASME Section XI, Subsections IWE and IWL. Given that there are fewer limitations and modifications placed on the use of earlier editions and addenda (1992 Edition with the 1992 Addenda and the 1995 Edition with the 1996 Addenda), it appears that the NRC has a greater concern with the use of the later Codes. However, the current requirement in 10CFR50.55a(g)(4)(i) and (ii) will continue to require licensees to update their inspection programs to the latest edition and addenda of the Code incorporated by reference in 10CFR50.55a(b).</p> <p>Therefore, when licensees are required to update their 120-month inservice inspection program, they will be required to use the 1998 Edition with the 2000 Addenda for Subsections IWE and IWL. In addition, many licensees may find that using the later edition and addenda of the Code (with the specified limitations and modifications) will be more objectionable than using editions and addenda previously endorsed in 10CFR50.55a, potentially prompting requests for relief.</p> <p>In the Federal Register Notice, the NRC indicates that "The Commission disapproved the elimination of the 120-month update requirement in an SRM dated April 13, 2000, because the ASME Codes are subject to continuing refinement and improvement and it</p>	<p>10CFR50.55a(g)(4)(i) should be revised (see underlined) to read as follows:</p> <p>(i) Inservice examinations of components and system pressure tests conducted during the initial 120-month inspection interval must comply with the requirements of <u>any</u> edition and addenda of the Code incorporated by reference in paragraph (b) of this section on the date 12 months prior to the date of issuance of the operating license, subject to the limitations and modifications listed in paragraph (b) of this section.</p> <p>10CFR50.55a(g)(4)(ii) should be revised (see underlined) to read as follows:</p> <p>(ii) Inservice examination of components and system pressure tests conducted during successive 120-month</p>

COM MENT NUM BER	PARAGRAPH PROPOSED RULE	PARAGRAPH 10 CFR 50.55A	COMMENT	PROPOSED REVISION
			<p>would be inappropriate to freeze these still evolving requirements." Given the number of proposed limitations and modifications for use with the 1998 Edition with the 2000 Addenda of the ASME Code, Section XI, Subsections IWE and IWL, it does not appear that the NRC believes that these subsections of the Code are, in fact, improving. As such, the basis for not eliminating the 120-month update could be challenged.</p> <p>If the NRC continues to find that earlier editions and addenda of the Code are less objectionable than those more recently issued, then 10CFR50.55a(g)(4)(i) and (ii) should be revised to allow the use of any editions and addenda of the Code addressed in 10CFR50.55a(b). If later editions and addenda of the Code are published that the NRC believes are improved and less objectionable, then it may be appropriate to eliminate reference to earlier endorsed editions and addenda of the Code in 10CFR50.55a.</p> <p>It may not be appropriate to "freeze" the referenced editions and addenda of the ASME Code in 10CFR50.55a. However, the suggested changes to 10CFR50.55a(g)(4)(i) and (ii) listed above may be beneficial and should be considered.</p> <p>These changes would allow licensees to avoid having to amend their inservice inspection programs to use later editions and addenda of the Code. However, unless the NRC takes exception to IWA-1400, licensees would still be required to submit their inservice inspection plans to the enforcement and regulatory authorities having jurisdiction at the plant site, and would have to amend their inservice inspection program when a 120-month interval expires and the edition and addenda of the Code currently used by the licensee is no longer endorsed in the regulation.</p>	<p>inspection intervals must comply with the requirements <u>of any</u> edition and addenda of the Code incorporated by reference in paragraph (b) of this section 12 months prior to the start of the 120-month inspection interval, subject to the limitations and modifications listed in paragraph (b) of this section.</p>

**TABLE 2**  
**COMMENT ON EXISTING REQUIREMENTS OF 10CFR50.55A**

10 CFR 50.55a Paragraph	Comment	Proposed Revision
<p>(b)(2)(viii)(C), (D), (E)</p> <p>(b)(2)(ix)(A) and (D)(1)</p>	<p>The following comment addresses existing requirements of 10CFR50.55a that are not affected by the proposed rule. However, we believe that changes should be made to 10CFR50.55a in conjunction with the proposed rule change to clarify the following issues for Class MC and Class CC components.</p> <p>10CFR50.55a(b)(2)(viii)(C), (D), (E), 10CFR50.55a(b)(2)(ix)(A) and (D)(1) require an Owner to provide specific information in the "ISI Summary Report required by IWA-6000". This is interpreted to be applicable only when those conditions described in 10CFR50.55a(b)(2)(viii)(C), (D), (E), 10CFR50.55a(b)(2)(ix)(A) and (D)(1) occur, and believes that most licensees have a similar interpretation. Because IWA-6210(c) does not require that an Owner prepare an ISI Summary Report for Class MC and Class CC components, we believe that most licensees have interpreted 10CFR50.55a(b)(2)(viii)(C), (D), (E), 10CFR50.55a(b)(2)(ix)(A) and (D)(1) to require only that the specific information required by the regulation be submitted to the NRC along with the ISI Summary Report for Class 1 and 2 components, prepared in accordance with IWA-6210(c) and IWA-6230.</p> <p>We also believe that most licensees do not interpret these provisions of the regulation to override the ASME Code, and that an ISI Summary Report need not be prepared in accordance with IWA-6210I and IWA-6230 for Class MC and Class CC components. This would seem logical because the reporting requirements in 10CFR50.55a(b)(2)(viii)(C), (D), (E), 10CFR50.55a(b)(2)(ix)(A) and (D)(1) apply only under certain listed conditions. When such conditions do not apply, a licensee need not prepare an ISI Summary Report for Class MC and Class CC components.</p>	<p>10CFR50.55a(b)(2)(viii)(C) should be revised (see underlined) to read as follows:</p> <p>(iii) When the elongation corresponding to a specific load (adjusted for effective wires or strands) during retensioning of tendons differs by more than 10 percent from that recorded during the last measurement, an evaluation must be performed to determine whether the difference is related to wire failures or slip of wires in anchorage. A difference of more than 10 percent must be identified <u>and reported to the Nuclear Regulatory Commission within 90 calendar days following completion of each refueling outage.</u></p> <p>10CFR50.55a(b)(2)(viii)(D) should be revised (see underlined) to read as follows:</p> <p>(iii) The licensee shall report the following conditions, if they occur, <u>to the Nuclear Regulatory Commission within 90 calendar days following completion of each refueling outage:</u></p> <p>(iii) The sampled sheathing filler grease contains chemically combined water exceeding 10 percent by weight or the presence of free water;</p> <p>(iii) The absolute difference between the amount removed and the amount replaced exceeds 10 percent of the tendon net duct volume;</p> <p>(iii) Grease leakage is detected during general visual examination of the containment surface.</p> <p>10CFR50.55a(b)(2)(viii)(E) should be revised (see underlined) to read as follows:</p> <p>(iii) For Class CC applications, the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas. For each inaccessible area identified, the licensee shall provide the following <u>in a report to the Nuclear Regulatory Commission within 90 calendar days following completion of each refueling outage:</u></p>

10 CFR 50.55a Paragraph	Comment	Proposed Revision
	<p>In addition to the above interpretation, it should be noted that the Form NIS-1 required by IWA-6210 (d) should not be required to be prepared for Class MC and Class CC components and need not be included in the ISI Summary Report. Please note that Interpretation #IN 01-017 was recently issued by ASME and indicates that Form NIS-1 is not required for Class MC or Class CC components. If it is the intent of the regulation that an ISI Summary Report be prepared for Class MC and Class CC components in accordance with IWA-6230, then it may also be necessary to add a modification to the regulation to take exception to IWA-6210 (d) to require the preparation of Form NIS-1 for Class MC and Class CC components.</p> <p>We offer the following information to assist the NRC with resolving the above issue:</p> <ul style="list-style-type: none"> <li>• If the modifications listed in 10CFR50.55a(b)(2)(viii)(C), (D), (E), 10CFR50.55a(b)(2)(ix)(A) and (D)(1) had not been included in the regulation, it would be clear to licensees that there is no requirement to prepare or submit an ISI Summary Report for Class MC and Class CC components.</li> <li>• Because the ISI Summary Reporting requirements for Class MC and Class CC components specified in 10CFR50.55a(b)(2)(viii)(C), (D), (E), 10CFR50.55a(b)(2)(ix)(A) and (D)(1) apply only when the described conditions occur, it appears that the intent of the regulation is to supply only that information required and specifically addressed in 10CFR50.55a(b)(2)(viii)(C), (D), (E), 10CFR50.55a(b)(2)(ix)(A) and (D)(1). If this were not the case, the regulation would have taken exception to IWA-6210 and IWA-6230 to require the preparation and submittal of ISI Summary Reports following completion of all Class MC and Class CC examinations, and not just when certain conditions occur.</li> </ul> <p>We believe that the suggested changes to 10CFR50.55a(b)(2)(viii)(C), (D), (E), 10CFR50.55a(b)(2)(ix)(A) and (D)(1) will provide the necessary clarification.</p>	<p>(iii) A description of the type and estimated extent of degradation, and the conditions that led to the degradation;  (iii) An evaluation of each area, and the result of the evaluation, and;  (iii) A description of necessary corrective actions.</p> <p>10CFR50.55a(b)(2)(ix)(A) should be revised (see underlined) to read as follows:</p> <p>(iii) For Class MC applications, the licensee shall evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or result in degradation to such inaccessible areas. For each inaccessible area identified, the licensee shall provide the following <u>in a report to the Nuclear Regulatory Commission within 90 calendar days following completion of each refueling outage</u>:</p> <p>(iii) A description of the type and estimated extent of degradation, and the conditions that led to the degradation;  (2) An evaluation of each area, and the result of the evaluation, and;  (3) A description of necessary corrective actions.</p> <p>10CFR50.55a(b)(2)(ix)(D)(1) should be revised (see underlined) to read as follows:</p> <p>(D) Section 50.55a(b)(2)(ix)(D) may be used as an alternative to the requirements of IWE-2430.</p> <p>(iii) If the examinations reveal flaws or areas of degradation exceeding the acceptance standards of Table IWE-3410-1, an evaluation must be performed to determine whether additional component examinations are required. For each flaw or area of degradation identified which exceeds acceptance standards, the licensee shall provide the following <u>in a report to the Nuclear Regulatory Commission within 90 calendar days following completion of each refueling outage</u>:</p> <p>(iii) A description of each flaw or area, including the extent of degradation, and the conditions that led to the degradation;  (ii) The acceptability of each flaw or area, and the need for additional examinations to verify that similar degradation does not exist in similar components, and;  (iii) A description of necessary corrective actions.</p>



10 CFR 50.55a Paragraph	Comment	Proposed Revision
(b)(2)(ix)	<p>IWE-5222 (1992 Edition with the 1992 Addenda through the 1998 Edition with the 2000 Addenda) allows a leakage test for certain minor repairs or modifications to the pressure retaining boundary to be deferred until the next scheduled leakage test in accordance with 10CFR50, Appendix J, provided nondestructive examination is performed in accordance with the approved repair program. One type of minor repair or modification for which this deferral is permitted is listed in IWE-5222(c) as follows:</p> <ul style="list-style-type: none"> <li>"welds attaching penetrations NPS 1 or smaller."</li> </ul> <p>10CFR50, Appendix J, Option B, paragraph I, footnote 3 indicates that "Specific guidance concerning a performance-based leakage-test program, acceptable leakage-rate test methods, procedures, and analyses that may be used to implement these requirements and criteria are provided in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program." Section C, "REGULATORY POSITION" of this regulatory guide, states that NEI 94-01, Revision 0, dated July 26, 1995, "Industry Guideline for Implementing Performance-Based Option of 10 CFR 50 Appendix J," prepared by the Nuclear Energy Institute, provides methods acceptable to the NRC staff for complying with the provisions of Option B in Appendix J to 10 CFR Part 50, (subject to specific limitations not listed here). NEI 94-01, paragraph 9.2.4 addresses containment repairs and modifications, and specifies provisions for deferral of leakage tests following certain types of repairs or modifications to the pressure-retaining boundary of containments. One type of repair or modification for which this deferral is permitted listed is as follows:</p> <p>"Welds attaching to steel pressure-retaining boundary penetrations, where the nominal diameter of the welds or penetrations does not exceed one inch."</p> <p>Please note that there is a difference between the leakage test deferral provisions in IWE-5222(c) and that specified in NEI 94-01, Revision 0, paragraph 9.2.4, bullet 3 and that there is now a conflict between these two NRC-endorsed documents, as described in greater detail below.</p> <p>IWE-5222(c) allows a deferral of the leakage test following the installation of welds attaching penetrations NPS 1 or smaller (at any</p>	<p>10CFR50.55a(b)(2)(ix) should be revised to read as follows:</p> <p>"Examination of metal containments and the liners of concrete containments. Licensees applying Subsection IWE, 1992 Edition with the 1992 Addenda, or the 1995 Edition with the 1996 Addenda, shall satisfy the requirements of paragraphs (b)(2)(ix)(A) through (b)(2)(ix)(E), and (b)(2)(ix)(K) of this section. Licensees applying the 1998 Edition with the 1999 Addenda and 2000 Addenda shall only satisfy the requirements of paragraphs (b)(2)(ix)(A), (b)(2)(ix)(B), (b)(2)(ix)(F) through (b)(2)(ix)(K) of this section."</p> <p>10CFR50.55a(b)(2)(ix)(K) should be added and should read as follows:</p> <p>(K) The leakage test deferral provisions of IWE-5222(c) shall be limited to welds connecting components NPS 1 (DN25) or smaller to pressure-retaining boundary penetrations.</p>

	<p>location on the pressure-retaining boundary of containment), provided nondestructive examination is performed in accordance with the approved repair program. NEI 94-01, Revision 0, paragraph 9.2.4, bullet 3, however, restricts the leakage test deferral to welded connections to containment pressure boundary <i>penetrations only</i>.</p> <p>We suggest that 10CFR50.55a be revised to take exception to IWE-5222(c) to eliminate this discrepancy and provide necessary clarification.</p>	
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