

PR 50
(75FR24323)



NUCLEAR ENERGY INSTITUTE

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July 20, 2010 (3:09pm)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

James H. Riley
PRINCIPAL ENGINEER
NUCLEAR GENERATION DIVISION

July 19, 2010

Secretary
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001
ATTENTION: Rulemaking and Adjudications Staff

Subject: Comments on Proposed Rulemaking to 10 CFR 50.55a, Codes and Standards (75FR24324), Docket ID NRC-2008-0554

Project Number: 689

On May 4, 2010, the NRC issued for comment a proposed change to 10CFR50.55a to incorporate, by reference, the following ASME Code documents into the regulation (75FR24324):

- The 2005 through 2008 Addenda of Section III Division 1
- The 2005 through 2008 Addenda of Section XI Division 1
- The 2005 and 2006 Addenda of the Operations and Maintenance (O&M) Code
- Code Case N 722-1, "Additional Examinations for PWR Pressure Retaining Welds for Class 1 Components Fabricated with Alloy 600/82/182 Materials Section XI Division 1"
- Code Case N-770, "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 Materials with or without Application of Listed Mitigation Activities"

The attached NEI comments were developed with input from our utility members. The industry is also developing comments on the code cases which will be submitted by EPRI.

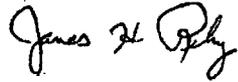
If you have any questions, please contact me at (202) 739-8137; jhr@nei.org.

Template = SECY-067

DS10

Secretary
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Sincerely,

A handwritten signature in cursive script, appearing to read "James H. Riley".

James H. Riley

Attachment

c: Mr. Mark L. Padovan, NRR/DPR/PRIB, NRC
Mr. Timothy R. Lupold, NRR/DCI/CPNB, NRC
NRC Document Control Desk

NEI COMMENTS ON 10 CFR PART 50.55a RULEMAKING

ITEM REFERENCE	COMMENT
75FR24336, 2nd Column	<p>The 1st new sentence states: <i>"Further, the revised IWL-2310 does not have any owner-defined provisions for performing visual examinations including VT-1 and VT-3 examinations."</i></p> <p>We believe that the reference to IWL-2310 should be changed to IWE-2310. The reference in the "body" of the rule appears to be correct and only the Section III Background needs to be changed.</p>
75FR24339, second column. 10 CFR 50.55a(b)(2)(xxv), first paragraph	<p>This paragraph states: <i>"The NRC proposes to add a new § 50.55a(b)(2)(xxv) to condition the use of ASME B&PV Code, Section XI, Nonmandatory Appendix E, "Evaluation of Unanticipated Operating Events." Appendix E provides acceptance criteria and guidance evaluating the effects of out-of-limit conditions on structural integrity of the reactor vessel beltline region. The NRC proposes to specify that Section E-1200 is not acceptable, and to set forth two conditions on the use of Section E-1300. One proposed condition would require that a 1/4T flaw be used in the linear elastic fracture mechanics (LEFM) evaluation with a margin of 1.4 applying to K_Im in the two LEFM criteria. The other proposed condition would also use K_{Ic} instead of K_IR in the Appendix E analysis."</i></p> <p>This portion of the proposed rule change should not specify that Section E-1200 is not acceptable. The intent of Section 1200 is to provide utilities a conservative and yet quick and easy screening method that can be used to immediately judge whether a reactor vessel can be returned to service following an unanticipated event or whether a more in depth analysis is needed. The screening criterion in Section E-1200 is conservative and acceptable because it ensures that a transient and reactor vessel materials are in a temperature region corresponding to upper shelf energy versus the transition region.</p> <p>The proposed rule change should also not require postulating a 1/4T flaw under Section E-1300. The intent of Section E-1300 is to use margins that are lower than what is currently in ASME Section XI Appendix G, Fracture Toughness Criteria for Protection Against Failures" while at the same time the margin must be large enough to ensure that the transient does not produce any extension of a postulated range of crack sizes.</p>

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<p>75FR24339, third column. 10 CFR 50.55a(b)(2)(xxv), third paragraph</p>	<p>We agree with the proposal to use K_{Ic} instead of K_{IR} in the Appendix E analysis</p> <p>This paragraph states: <i>"The above qualitative justification for selecting the 1-inch depth for the postulated flaw is not sufficient. The ASME B&PV Code, Section XI, Appendix G, "Fracture Toughness Criteria for Protection Against Failure," analysis, which can be considered as the first "screening" criterion for safe operation of an RPV, is based on a postulated flaw of one-quarter of the RPV wall thickness (1/4T). The Section XI, Appendix E analysis is employed when the ASME B&PV Code, Appendix G requirements are exceeded due to an out-of-limit condition. Hence, it is considered as the second "screening" criterion, i.e., once satisfied, a refined analysis or a special RPV inspection is not needed. As the second screening tool, the Section XI, Appendix E analysis has to be conservative."</i></p> <p>We do not agree with the statement that "The above qualitative justification for selecting the 1-inch depth for the postulated flaw is not sufficient". The use of a postulated 1-inch flaw is sufficient for ensuring that crack extension will not occur. Reactor vessels are inspected in accordance with ASME Section XI by supplemental PDI and Appendix VIII requirements. Actual flaws sizes in reactor vessel beltline regions are small and do not approach 1-inch in depth. Thus, there is still a margin of 10 on flaw size for small flaws that have a depth of 0.10 inch compared to a 1-inch deep postulated flaw. Furthermore, it is noted that the material properties in the beltline weld exceed those used in the analysis related to the lower bound reference temperature. Taken together, use of the lower bound reference temperature and a 1-inch postulated flaw is sufficient for preventing crack extension.</p> <p>The use of a larger postulated flaw size has the potential to produce unacceptable analytical results, when crack extension has not occurred, and thereby would unnecessarily delay return of plant operation.</p>
<p>75FR24339, bottom of the third column</p>	<p>This section states: <i>"In addition, the following three concerns prompt the NRC to propose the use of a 1/4T flaw in the Appendix E, Section E-1300 analysis:</i></p> <ul style="list-style-type: none"> <li data-bbox="940 1235 1911 1367">• <i>In the probabilistic fracture mechanics (PFM) analyses supporting the proposed PTS rule, the truncated flaw depth for a repair weld flaw is 2 inches. For a deterministic analysis, the possibility of having a repair weld flaw line up with a clad flaw to become a surface flaw cannot be ruled out.</i>

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	<ul style="list-style-type: none"> <li data-bbox="945 272 1911 454">• <i>The Pressure Vessel Research User's Facility (PVRUF) and Shoreham RPV flaw data, used to develop generic flaw distributions for the proposed PTS rule, identified flaws that were consistently smaller than the proposed bounding flaw. However, the PVRUF and Shoreham data represent only a limited sampling of all RPV welds and may not directly provide an adequate bounding flaw size for a deterministic analysis like that of ASME B&PV Code, Section XI, Appendix E.</i> <li data-bbox="945 495 1911 619">• <i>The use of a 1/4T flaw assumption also provides additional assurance that any service-induced growth of current fabrication flaws will be bounded for any RPVs having experienced severe transients over the course of their operating lifetimes.</i> <p data-bbox="808 652 1921 941"><i>Requiring that a 1/4T flaw be used in the LEFM evaluation with a margin of 1.4 applying to KIm in the two LEFM criteria establishes a consistent approach regarding the postulated flaw size in the two deterministic LEFM analyses in ASME B&PV Code, Section XI, Appendices E and G. Applying the margin of 1.4 only to KIm is consistent with the ASME B&PV Code, Section XI, Appendix G approach, making the decreased margin between the two appendices traceable. The proposed use of a smaller margin of 1.4 in the ASME B&PV Code, Section XI, Appendix E analysis is justified because all significant stress intensity factors resulting from an actual transient are considered. Further, using a 1/4T flaw is also consistent with prior NRC approaches for evaluation of RPV structural integrity after out-of-limit events."</i></p> <p data-bbox="808 974 1921 1329">It is not necessary to change the postulated flaw size in Section E-1300 from a 1-inch deep flaw to a 1/4T flaw. The indicated reason for this change in postulated flaw size is so that the basis for various reactor vessel integrity evaluations should be the same. The basis for analysis of a reactor vessel following an unanticipated transient versus operation of a plant should not be the same. It is desirable to require higher margins for PTS and heatup/cooldown curves which are used to establish limits for operation of a plant. Once the limits for heatup/cooldown curves are exceeded then different lower margins should be used to ensure that crack extension has not occurred during the transient. The use of a 1-inch deep flaw is acceptable because a larger flaw does not exist (thus the flaw size is conservative) and the analysis uses conservative material properties relative to values in the CMTR and surveillance capsule program (thus the material properties are conservative).</p> <p data-bbox="808 1362 1921 1387">It is further noted that industry has investigated the impact of flaw size on core damage</p>

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	frequency for PTS and heatup and cooldown transients. The results indicate that a 1 inch flaw size is acceptable.
75FR24340, first column, bottom of the second paragraph	<p>The section states: <i>"The EPRI NP-5151 report mentioned that reference toughness KIR has been used in the LEFM evaluation in the prior NRC evaluation of RPV structural integrity after out-of-limit events. Consistent with the evolution of the ASME B&PV Code, Section XI, Appendix G analysis, the NRC now proposes to use KIc instead of KIR in the ASME B&PV Code, Section XI, Appendix E analysis."</i></p> <p>We find that the proposed change to KIc instead of KIR in the ASME B&PV Code, Section XI, Appendix E analysis is acceptable but not necessary. The use of either KIc or KIR is acceptable in that both reference toughness curves are conservative relative to the reactor vessel material properties. The evaluation report to be generated in accordance with Section E-1300 following the unanticipated event should document which reference toughness curve is used in the analysis.</p>
75FR24341, "Snubber Examination and Testing"	<p>The NRC proposes to revise paragraphs (g)(2), (g)(3)(i), (g)(3)(ii), (g)(4), (g)(4)(i) and (g)(4)(ii) to require that the provisions in Subsection ISTD of the ASME OM Code, and the optional ASME code cases listed in Regulatory Guide 1.192, be used for the ISI of snubbers. The introductory text of paragraph (g)(4) would be revised to require that licensees use the provisions for examination and testing of snubbers in Subsection ISTD of the ASME OM Code.</p> <p>In lieu of the provisions in Subsection ISTD of the ASME OM Code and optional ASME code cases, snubber examination and testing should be in accordance with plant Technical Specifications. Plant Technical Specifications are very detailed in terms of snubber examination and testing, including inspection types, visual inspection acceptance criteria, functional tests, functional test acceptance criteria, functional test failure analysis, functional testing of repaired or replaced snubbers, snubber seal replacement program, snubber visual inspection interval and number of unacceptable snubbers. The introductory text and other applicable sections should state that licensees use the provisions for examination and testing of snubbers in Subsection ISTD of the ASME OM Code or the requirements in plant Technical Specifications.</p>
75FR24341, 3rd Column, 10 CFR 50.55a(g)(5)(iii) and (g)(5)(iv)	<p>The second sentence states: <i>"The NRC proposes to add a sentence to 50.55a(g)(5)(iii) to clarify that a request for relief must be submitted to the NRC no later than 12 months after the examination has been attempted during a given ISI interval and the ASME B&PV Code requirements determined to be impractical."</i></p>

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	<p>The existing wording in 50.55a(g)(5)(iii) does not contain any time limit on notification of the Commission for impractical Code requirements. "Submittal no later than 12 months after the examination has been determined to be impractical" is a change from the historical process used by Licensees and approved by the NRC. Licensees have typically utilized the time restraints contained in 50.55a(g)(5)(iv) (i.e., no later than 12 months after the applicable 120-month ISI interval).</p> <p>The ASME XI Code allows for flexible scheduling of examinations throughout the 10-year ISI Interval. Changes in NDE technology/equipment could result in the ability to perform an examination that was initially determined to be impractical. If the NRC requires Licensees to submit requests for relief no later 12 months after an examination was attempted during a given ISI interval and the NRC approves the submittal, then the Licensee and Regulator are not required to re-evaluate impracticality again until the subsequent 10-year ISI interval. In practice, this would unintentionally discourage early examination and attempts to improve coverage within an examination period. If the relief request is not required to be completed until the examination is due, the incentives for early examination and innovation to improve coverage is not removed. In summary, submittal no later than 12 months after examination is attempted could result in confusion and missed opportunities to apply developing technologies and examination equipment.</p> <p>Furthermore, the change to paragraph (g)(5)(iii) does not provide a basis for requiring impracticality relief requests to be submitted within 12 months of the completion of the examination as compared to the submittal timeframe contained in paragraph (g)(5)(iv).</p> <p>The requirements of 10 CFR 50.55a(g)(5)(iii) and (g)(5)(iv) contradict each other without some additional explanation. In both cases, a request for relief is needed; however, both (iii) and (iv) use the term "impractical". We are making the assumption that (iii) is used for an examination that cannot be performed (i.e., zero examination coverage) while (iv) is used when the examination is limited but some examination is possible. Additional words are needed to describe these two situations.</p> <p>We believe it is impractical to submit relief requests after each outage. This requirement would result in at least one company having to submit an estimated forty (40) additional relief requests for its existing six nuclear plants during an ISI interval. This is an unreasonable</p>

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	<p>burden for licensees and also places extra burden on the NRC staff for review of the submittals.</p> <p>The clarification proposed for 50.55a(g)(5)(iv) is better suited for impractical Code and examination requirements addressed by both 50.55a(g)(5)(iii) and 50.55a(g)(5)(iv), however, We recommend wording similar to the following two paragraphs [(iii) and (iv)].</p> <p>"(iii) If a licensee determines that conformance with an ASME B&PV Code requirement is impractical for its facility, the licensee shall notify the Commission and submit, as specified in §50.4 information to support the determination. Determination of impracticality in accordance with this section must be based on the actual limitations experienced when attempting to comply with the code requirements during the inservice interval for which the request is being submitted. Request for relief made in accordance with this section must be submitted to the NRC not later than 12 months after the end of the applicable 120 month ISI interval for which relief is sought."</p> <p>"(iv) Where a licensee determines that an examination required by the Code is impractical, and is not included in the updated inservice inspection program as permitted by paragraph (g)(4) of this section, the basis for this determination must be submitted to the NRC not later than 12 months after the expiration of the of the applicable 120-month inspection interval for which relief is sought."</p>
75FR24341, 3rd Column, 10 CFR 50.55a(g)(5)(iii) and (g)(5)(iv)	<p>The NRC's proposed changes to paragraph g(5)(iii) could affect examinations associated with weld repairs. The NRC Staff has concluded that licensees "usually cannot make the determination that an examination is indeed impractical without first attempting the examination..." The NRC clearly had limited examination coverage associated with ISI examinations in mind when they included this proposed change. However, paragraph (g)(5) in general and this proposed change in particular could also have a direct impact on examinations associated with welds and weld repairs performed during the course of a repair/replacement activity. In some cases, it may be "impractical" to perform an examination for an installation weld or a weld repair required by the Construction Code or ASME Section XI, IWA-4000. For example, weld repairs of ASME Section III Class 1 CEDM nozzles with repair cavities that exceed 10% of the wall thickness must be examined by RT to comply with IWA-4000 and NB-2500 of ASME Section III. In the past, relief requests have been submitted prior to performing the repair to propose an NDE alternative (UT). However, based on the proposed change to paragraph (g)(5)(iii), it could be argued that a relief request does not have to be submitted until after performance of the weld repair and alternative NDE or NDE with limited coverage. If</p>

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	<p>the intent is to exclude NDE associated with welds and weld repairs (i.e., repair/replacement activities), then the proposed change to paragraph (g)(5)(iii) should be revised to make this clarification.</p>
<p>75FR24347, (b)(2)(xxv)</p>	<p>The NRC proposes to add a new paragraph (b)(2)(xxv) which would condition the use of ASME B&PV Code, Section XI, Nonmandatory Appendix E, by establishing that Section E-1200 is not acceptable for use.</p> <p>The proposed rule change should not prohibit the use of ASME B&PV Code, Section XI, Nonmandatory Appendix E Section E-1200. We request that NRC make no rule change that would restrict the current use and analysis methods under Section E-1200. Section E-1200 is desirable for utility use to determine if additional analysis is needed to assess the structural integrity of a reactor vessel following an unanticipated transient prior to returning it to service. The Section E-1200 method of evaluation is quick thus it can be implemented in a timely manner and yet it is conservative as it ensures that upper shelf energy material properties are maintained.</p>
<p>75FR24348, first column, (g)(5)(iii) and (iv)</p>	<p>In section 10 CFR 50.55a(g)(5)(iii) the NRC proposes to revise paragraph (g)(5)(iii) by adding a sentence to clarify that a request for relief must be submitted to the NRC no later than 12 months after the examination has been attempted during a given ISI interval and the ASME Code requirement determined to be impractical.</p> <p>And again, in section 10 CFR 55a(g)(5)(iv) the NRC proposes to revise paragraph (g)(5)(iv) to clarify that licensees are required to submit requests for relief based on impracticality within 12 months after the end of the ISI interval for which relief is being sought.</p> <p>The main point of discussion on the related subject in the third column of page 24341 appears to emphasize the need to attempt the examination before submitting a relief based on impracticality, so that actual exam limitations encountered for the particular interval may be documented. Percentages of coverage may improve over time with advancing NDE techniques. We concur with this logic but question the deadline for submitting such relief requests as stated in proposed change to 10CFR50.55a(g)(5)(iii) and asks that a revision be made. These type of reliefs are often similar in nature and may be collected and grouped into one relief request letter using a tabular format as outlined in the NEI White Paper, "Standard Format for Requests from Commercial Reactor Licensees Pursuant to 10 CFR50.55(a)", Rev 1, June 2004, Appendix B, Template 6. This method seems practical to minimize preparation and review time for both the utility and the Commission. We also believe relief requests should be submitted on a</p>

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	<p>regular basis rather than waiting until the end of the Interval to submit all limited examinations. The licensee may desire to attempt improved coverage with a subsequent effort in the next refueling outage. Planning for removal of unanticipated interferences or adjustment in NDE technique may be needed. A substitute weld that can be more fully examined may also be selected upon later review of the program requirements. Second attempts for the examination of the weld selected or for additional welds to supplement justification of acceptance for the limitation would be more common when implementing a new Risk Informed ISI Program. Specific percentages of completion for ASME categories are not required by the ASME Code until the end of each period. Therefore, we recommend that groupings of limited examinations be allowed submittal on a frequency of once per period as the earliest. The letter should be submitted no later than 12 months after the close of each period.</p> <p>Also see comment on 75FR75FR24341, 3rd Column, 10 CFR 50.55a(g)(5)(iii) and (g)(5)(iv) above.</p>
75FR24358, (xxv)	<p>This section states: <i>"(xxv) Evaluation of unanticipated operating events. The provisions of ASME B&PV Code, Section XI, Appendix E, Section E-1200 are not approved for use. In addition, when using the provisions of Section E-1300, the analytical procedure must be based on a postulated semi-elliptical surface flaw of a one-quarter vessel thickness (i.e., the "minimum initiation crack size" in Table E-2 shall be a 1/4T flaw) and the linear elastic fracture mechanics criteria be as follows:</i></p> <p><i>1.4K_Im + K_Ir = K_Ic for the LTOP condition, and 1.4K_Im + K_It + K_Ir = K_Ic, for the PTT condition."</i></p> <p><i>The proposed rule change should not prohibit the use of ASME B&PV Code, Section XI, Nonmandatory Appendix E Section E-1200 or the provision to require minimum initiation crack size" in Table E-2 shall be a 1/4T flaw."</i></p> <p>We believe that Section E-1200 is useful and conservative and that prohibiting use of Section E-1200 will ultimately result in unnecessary shutdown or loss of generation because of the additional time required to perform analysis under Section E-1300. It is estimated that a Section E-1200 evaluation can be completed in hours while a Section E-1300 evaluation can require days or weeks. Furthermore, use of a 1/4T flaw size can produce unacceptable analytical results, when crack extension has not occurred, thereby complicating the resolution</p>

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	<p>process.</p> <p>The requirement to use a minimum initiation crack size in Table E-2 of 1/4T is not necessary. The current provision in Table E-2 for a crack size up to 1 inch deep is sufficient because actual flaw sizes do not approach even the 1 inch depth and are closer to a depth of approximately 0.10 deep. Use of Section XI, EPRI PDI, and Appendix VIII provides continuous verification that the beltline region welds are either free of defects larger than approximately 0.10 inch or that they are documented and recorded. The analysis under Section E-1300 is conservative to prevent crack extension based upon reference toughness curves that are conservative to actual beltline material properties.</p> <p>It is recommended that NRC work with ASME Section XI, Electrical Power Research Institute, and/or Pressurized Water Reactor Owners Group to recommend changes and resolve technical comments such as those itemized in the proposed rule change for Section XI, Nonmandatory Appendix E "Evaluation of Unanticipated Operating Events." that are not necessary to ensure structural integrity of the reactor vessel as opposed to making a rule change to 10CFR Part 50.</p>
75FR24358, first column, §(b)(3)(v) Subsection ISTD	<p>This paragraph may be confusing as re-written. We recommend that the paragraph be re-worded as shown below.</p> <p><i>"Inservice Inspection Requirements for Snubbers in the ASME B&PV Code Section XI must be used when performing inservice inspection examinations and tests of snubbers at nuclear plants, except as modified in (A) and (B) below."</i></p>
75FR24358, first column, §(b)(3)(v)(B) Subsection ISTD	<p>The last sentence of §(b)(3)(v)(A) states: <i>"Preservice and Inservice examinations must be performed using the VT-3 visual examination method described in IWA-2213."</i></p> <p>However, §(b)(3)(v)(A) is an option for licensees using editions and addenda up to the 2005 edition of the ASME B&PV Code, Section XI, paragraphs IWF-5200(a) and (b) and IWF-5300(a) and (b). Paragraph §(b)(3)(v)(B) does not contain an equivalent condition relative to VT-3 examination. Does this indicate that after licensees are required to use the 2006 Addenda and later editions and addenda of the ASME B&PV Code and the equivalent endorsed edition and addenda of the ASME OM Code, Subsection ISTD, that VT-3 visual examination equivalent to ASME Section XI, paragraph IWA-2213 is no longer required?</p> <p>The examination boundary for a snubber examination as defined in ISTD is the snubber unit out to the pins that hold it in place. Does the NRC still contend that the pin-to-pin ISTD</p>

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	<p>examination of the snubber unit should be a VT-3, even though a VT-3 examination is a Section XI requirement?</p> <p>The examination boundary for a snubber (or any support) as defined in IWF of Section XI is from the pressure boundary surface to the building structure. The removal of snubber examinations from ASME Section XI does not remove the requirement to perform a VT-3 Section XI examination of the support structure(s). Is this the intent of the NRC?</p>
75FR 24360, second column, §(g)(5)(iii)	See discussion above for "75FR24341, 3rd Column, ..."
75FR 24360 and 75FR24342, (g)(6)(ii)(E)(1)	<p>The proposed change on page 24360 regarding paragraph (g)(6)(ii)(E)(1) states "<i>...the conditions specified in paragraphs (g)(6)(ii)(E)(2) through (g)(6)(ii)(E)(4) of this section.</i>"</p> <p>Even though there appears to be no proposed changes to existing paragraph (g)(6)(ii)(E)(4) on page 24342. Recommend NRC Staff avoid some confusion over whether there is an existing editorial error by adding paragraph (g)(6)(ii)(E)(4) or specifying that there are no changes to paragraph (g)(6)(ii)(E)(4).</p>
75FR24360 and 75FR24343, (g)(6)(ii)(F)(2)	<p>The proposed paragraph (g)(6)(ii)(F)(2) requires that welds that have been mitigated by weld inlay, onlay of corrosion resistant cladding, or stress improvement by welding be categorized for ISI frequency as Inspection Item A-1, A-2, or B. This proposed change is inconsistent with other NRC proposed revisions, or with later revisions of Code Case N-770. For example, paragraph (g)(6)(ii)(F)(6) requires that a weld that has been mitigated by inlay or corrosion resistant cladding, and then is found to be cracked, be reclassified as and inspected using the frequencies of Inspection Item A-1, A-2, or B. This indicates that an uncracked weld that has been mitigated by inlay or corrosion resistant cladding would NOT be categorized as inspection Items A-1, A-2 or B following an acceptable pre-service examination. Another example is proposed change to paragraph (g)(6)(ii)(F)(7), which requires that all hot-leg operating temperature welds mitigated by inlay or corrosion resistant cladding be examined each interval and that a 25 percent sample of cold-leg operating temperature welds be inspected whenever the core barrel is removed or a 20 year frequency. This example is also inconsistent with Inspection Item A-1, A-2, or B.</p>
75FR24361 and 75FR24343, (g)(6)(ii)(F)(3)	<p>The proposed condition to complete the baseline examination of welds in Inspection items A-1, A-2, and B at the next refueling outage after the effective date of the final rule does not allow adequate time for planning and budgeting cycles needed to prepare for implementing these new requirements and preparing for potential repairs. The schedule for baseline examinations specified in paragraph 2200 of Code Case N-770 should be applied to accommodate normal budgeting and outage scope scheduling for these new requirements.</p>

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75FR24343 and 75FR24361, (g)(6)(ii)(F)(4)	<p>It is not uncommon for the DM welds in the PWR plants to have a taper transition from one side of the weld to the other side of the weld. This taper transition typically will not meet the flatness requirements needed to achieve essentially 100% coverage of the examination volume for a PDI qualified examination, when examining for axially oriented flaws. Note, it is assumed that essentially 100% coverage means greater than 90 percent as implemented in Code Case N-460 and clarified in NRC Information Notice 98-42. The taper transition cannot be removed by simply removing excess weld material in the weld crown. It would typically require a change to the design of the component and welded connection to obtain a surface geometry that would allow essentially 100% coverage of the examination volume, when examining for axially oriented flaws. Because an axially oriented PWSCC flaw is limited to the PWSCC susceptible material, the axial flaw size would not be large enough to result in a safety concern. This has been documented in numerous MRP reports and PWROG evaluations. Because the axially oriented PWSCC flaw does not present a safety concern, it should not be necessary to achieve essentially 100% coverage of the exam volume when examining for axially oriented flaws.</p>
75FR24361, (g)(6)(ii)(F)(14)	<p>Comment 1 Proposed section (g)(6)(ii)(F)(14) would extend the examination volume of a full structure weld overlay in the axial direction. Pre-existing overlays may not be long enough to meet this requirement. This condition should be revised to specify that pre-existing weld overlays shall be examined to the specified volume, or the extent possible if the overlay is not long enough to meet the new examination volume axial length.</p> <p>Comment 2 The examination volume A-B-C-D specified in Figures 2(b) and 5(b) of Code Case N-770 was revised/corrected in Code Case N-770-1 such that E-F-G-H volume is entirely contained within the overlay material. For application of IWB-3514, the thickness "t2" was revised/corrected to reflect the total thickness of the original pipe plus the overlay.</p> <p>It is recommended that the proposed NRC condition be revised to incorporate these changes. On page 24345, the NRC Staff discusses consideration of endorsing an ASME-approved revision to Code Case N-770 in the final rule to update 10 CFR 50.55a, which could allow conditions mentioned above to be modified or deleted..</p>
75FR24361 and 24344, (g)(6)(ii)(F)(15)	<p>In a typical inlay or onlay mitigation, no structural credit is taken for the inlay/onlay material (cladding). Existing ASME Section XI rules should be applied for acceptance criteria for cladding (flaws in the inlay/onlay material) and base metal (for flaws that are in structural materials) when the inlay/onlay is not credited for structural qualification.</p>

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75FR24361 and 24344, (g)(6)(ii)(F)(16)	Proposed paragraph (g)(6)(ii)(F)(16) condition that involves inspection item D should have an extent and frequency of examination that differs from item E due to the very nature that the butt weld was uncracked initially prior to the stress improvement application (optimized weld overlay). Following the post application initial examination, the weld should be placed into a population to be examined on a modified sample basis, i.e. condition of 50 percent inspection sample plan as opposed to the 25 percent inspection sample specified in N-770. This inspection basis should provide sufficient representation for the industry to gain experience with the optimized weld overlays.

Rulemaking Comments

From: Padovan, Mark
Sent: Tuesday, July 20, 2010 2:26 PM
To: Rulemaking Comments
Subject: FW: Comments on Proposed Rulemaking to 10 CFR 50.55a, Codes and Standards (75FR24324), Docket ID NRC-2008-0554
Attachments: 07-19-10_NRC_Proposed Rule Change to 10CFR50.55a.pdf; 07-19-10_NRC_Proposed Rule Change to 10CFR50.55a_Attachment.pdf

From: Lupold, Timothy
Sent: Tuesday, July 20, 2010 12:49 PM
To: Padovan, Mark
Cc: Helton, Shana; Hoffman, Keith; Collins, Jay
Subject: FW: Comments on Proposed Rulemaking to 10 CFR 50.55a, Codes and Standards (75FR24324), Docket ID NRC-2008-0554

Mark,

Jim Riley called me yesterday and said he was going to send comments in regarding the proposed rulemaking. I told him to also send them to you. I cannot tell if you were on distribution for these or not, so here they are. I have not yet looked at the attachments, but will do so soon.

From: BELL, Denise [mailto:dxb@nei.org] **On Behalf Of** RILEY, Jim
Sent: Monday, July 19, 2010 3:37 PM
Subject: Comments on Proposed Rulemaking to 10 CFR 50.55a, Codes and Standards (75FR24324), Docket ID NRC-2008-0554

July 19, 2010

Secretary
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001
ATTENTION: Rulemaking and Adjudications Staff

Subject: Comments on Proposed Rulemaking to 10 CFR 50.55a, Codes and Standards (75FR24324), Docket ID NRC-2008-0554

Project Number: 689

On May 4, 2010, the NRC issued for comment a proposed change to 10CFR50.55a to incorporate, by reference, the following ASME Code documents into the regulation (75FR24324):

- The 2005 through 2008 Addenda of Section III Division 1
- The 2005 through 2008 Addenda of Section XI Division 1
- The 2005 and 2006 Addenda of the Operations and Maintenance (O&M) Code

- Code Case N 722-1, "Additional Examinations for PWR Pressure Retaining Welds for Class 1 Components Fabricated with Alloy 600/82/182 Materials Section XI Division 1"
- Code Case N-770, "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 Materials with or without Application of Listed Mitigation Activities"

The attached NEI comments were developed with input from our utility members. The industry is also developing comments on the code cases which will be submitted by EPRI.

If you have any questions, please contact me at (202) 739-8137; jhr@nei.org.

Sincerely,

James H. Riley

Attachment

James H. Riley
Principal Engineer

Nuclear Energy Institute
1776 I Street NW, Suite 400
Washington, DC 20006
www.nei.org

P: 202-739-8137
F: 202-785-4019
M: 202-439-2459
E: jhr@nei.org

nuclear. clean air energy.

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Content-Type: application/ms-tnef; name="winmail.dat"
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From: "Padovan, Mark" <Mark.Padovan@nrc.gov>
To: Rulemaking Comments <Rulemaking.Comments@nrc.gov>
Date: Tue, 20 Jul 2010 14:26:27 -0400
Subject: FW: Comments on Proposed Rulemaking to 10 CFR 50.55a, Codes and
Standards (75FR24324), Docket ID NRC-2008-0554
Thread-Topic: Comments on Proposed Rulemaking to 10 CFR 50.55a, Codes and
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