



PR 50  
(75FR24323)

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USNRC

July 20, 2010 (4:45pm)

John F. McCann  
Vice President - Nuclear Safety,  
Emergency Planning, and Licensing

July 19, 2010  
ENOC-10-0024

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

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

**SUBJECT: Comments on NRC Proposed Rule; 10 CFR 50.55a, Codes and Standards  
(Docket NRC-2008-0544)**

Dear Sir or Madam:

Entergy Operations, Inc and Entergy Nuclear Operations, Inc (Entergy) are providing this letter in response to the NRC request for comments on the subject proposed rule, as published in 75 FR 24324 dated May 4, 2010. Entergy's comments are provided in Attachment I.

If you have any questions regarding these comments, please contact Mr. Steve Scott at (601) 368-5456.

Sincerely,

A handwritten signature in black ink, appearing to be "JFM".

JFM/ RWB

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**ENOC-10-0024  
ATTACHMENT I**

**ENTERGY OPERATIONS, INC  
ENTERGY NUCLEAR OPERATIONS, INC**

**COMMENTS ON PROPOSED RULE REGARDING  
10 CFR 50.55a, CODES AND STANDARDS**

**DOCKET 2008-0544 / 75 FR 24324; MAY 4, 2010**

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Attachment I  
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**ENTERGY COMMENTS ON  
PROPOSED CHANGE TO 10 CFR 50.55a, CODES AND STANDARDS**

An NRC request for comment on proposed changes to 10 CFR 50.55a was published in 75 FR 24324 dated May 4, 2010. The NRC proposed to amend its regulations to incorporate by reference the 2005 Addenda through 2008 Addenda of Section III, Division 1, and the 2005 Addenda through 2008 Addenda of Section XI, Division 1, of the ASME *Boiler and Pressure Vessel Code* (ASME B&PV Code); and the 2005 Addenda and 2006 Addenda of the ASME Code for Operation and *Maintenance of Nuclear Power Plants* (ASME OM Code). The NRC also proposed to incorporate by reference ASME Code Cases N-722-1 and N-770.

Entergy's comments on the proposed changes are provided below.

**Comments on 10 CFR 50.55a(g)(5)(iii) and 10 CFR 50.55a(g)(5)(iv) / Pages 24341 and 24348**

The NRC proposes to revise paragraph (g)(5)(iii) by adding a sentence to clarify that an "impracticality" 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.

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.

**Comment 1**

The proposed change to paragraph (g)(5)(iii) on page 24348 appears to be in conflict with the proposed change to paragraph (g)(5)(iv). Although both paragraphs involve impracticality relief requests, the new proposed changes contradict each other. Proposed changes to (g)(5)(iii) require relief submittal no later than 12 months after the examination has been attempted, whereas the changes to (g)(5)(iv) clarified that all relief requests shall be submitted no later than 12 months following the interval end date. As discussed on page 24341, if the intent of the change to (g)(5)(iii) is to ensure the licensee attempts the examination prior to submitting the request for relief, then it is recommended that the proposed change not be implemented and additional words be added to the existing (g)(5)(iii) to read as follows "If the licensee has determined that conformance with certain code requirements is impractical *following attempts to perform the examination per code requirement* for its facility, the licensee shall notify the Commission ... ." As a result, the "impracticality" relief requests will be submitted in accordance with the time frame specified in the proposed clarification of (g)(5)(iv).

Entergy agrees with the NRC that submitting relief requests under (g)(5)(iii) prior to attempting to examine a limited examination coverage component is an inappropriate basis for determination of impracticality. Entergy does not want to place an unnecessary burden on both the licensee and the NRC Staff to potentially review an issue twice.

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## Comment 2

In addition to comment 1 above, proposed changes to (g)(5)(iii) also has other applicability concerns. The NRC Staff has concluded that licensees "usually cannot make the determination that an examination is indeed impractical without first attempting the examination..." The proposed change seems to be intended for limited examination coverage associated with ISI examinations. However, paragraph (g)(5) in general and this proposed change in particular could also impact 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 Control Element Drive Mechanism (CEDM) nozzles with repair cavities that exceed 10% of the wall thickness must be examined by radiography test 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 a non-destructive examination (NDE) alternative (e.g., ultrasonic testing). The proposed change to paragraph (g)(5)(iii) could imply 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 the scope of the proposed change to paragraph (g)(5)(iii) does not include NDE associated with welds and weld repairs (i.e., repair/replacement activities), then the proposed change should be revised to make this clarification.

### **Comments on 10 CFR 50.55a(g)(6)(ii)(E) / Pages 24342 & 24360**

The proposed change on page 24360 regarding paragraph (g)(6)(ii)(E)(1) states "...the conditions specified in paragraphs (g)(6)(ii)(E)(2) through (g)(6)(ii)(E)(4) of this section." There appears to be changes to (g)(6)(ii)(E)(2) and (g)(6)(ii)(E)(3), but no proposed changes to existing paragraph (g)(6)(ii)(E)(4). Therefore, recommend the NRC Staff specify there are no changes to paragraph (g)(6)(ii)(E)(4).

### **Comments on 10 CFR 50.55a(g)(6)(ii)(F)(2) / Pages 24343 & 24360**

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.

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**Comments on 10 CFR 50.55a(g)(6)(ii)(F)(3) / Pages 24343 & 24361**

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.

**Comments on 10 CFR 50.55a(g)(6)(ii)(F)(4) / Pages 24343 & 24361**

It is not uncommon for the dissimilar metal 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 Performance Demonstration Initiative (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 primary water stress corrosion cracking (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.

**Comments on 10 CFR 50.55a(g)(6)(ii)(F)(14) / Page 24361**

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.

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. It is recommended that the proposed NRC condition be revised to incorporate these changes. Note, this recommendation is supported by NRC Staff discussion on page 24345, regarding their 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.

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**Comments on 10 CFR 50.55a(g)(6)(ii)(F)(15) / Pages 24344 & 24361**

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.

**Comments on 10 CFR 50.55a(g)(6)(ii)(F)(16) / Pages 24344 & 24361**

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, e.g. establish a condition for a 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.