UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, D.C. 20555-0001

October 19, 2004

NRC REGULATORY ISSUE SUMMARY 2004-16: USE OF LATER EDITIONS AND ADDENDA TO ASME CODE SECTION XI FOR REPAIR/REPLACEMENT ACTIVITIES

ADDRESSEES

All holders of operating licenses for nuclear power reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to clarify the requirements in Title 10 of the Code of Federal Regulations, Part 50, paragraph 55a(g)(4)(iv) (10 CFR 50.55a(g)(4)(iv)), and the use of American Society of Mechanical Engineers (ASME) Code Case N-389-1, "Alternative Rules for Repairs, Replacements, or Modifications-Section XI, Division 1," when applying the rules of later editions and addenda of ASME Code Section XI, "Rules for Inservice Inspection of Nuclear Plant Components."

BACKGROUND

Section 50.55a governs the use of codes and standards, including the ASME Boiler and Pressure Vessel Code (ASME Code). Paragraph 50.55a(g)(4)(iv) provides requirements on the use of later editions and addenda of the ASME Code for the inservice examination of components and system pressure tests.

ASME Code Case (Code Case) N-389-1 provides guidance on which editions and addenda of ASME Code Section XI licensees may use when making a repair, replacement, or modification to nuclear plant components. Specifically, the Code Case states that licensees may use later editions and addenda of ASME Code Section XI than those specified in the owner's inservice inspection program, provided that all related requirements are met. The Code Case further states that the later editions and addenda need to be accepted by the enforcement and regulatory authorities having jurisdiction at the plant site.

Code Cases provide alternatives to existing ASME Code requirements. Those Code Cases that the NRC finds acceptable are included in NRC's Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1." Regulatory Guide 1.147,

Revision 13, was incorporated by reference into 10 CFR 50.55a, “Codes and Standards,” by a final rule (68 FR 40469, July 8, 2003). The NRC approved Code Case N-389-1 in Regulatory Guide 1.147, Revision 13, with no conditions. The provisions of Code Case N-389-1 have also been incorporated into Section XI of the ASME Code in the 1995 edition through 1995 addenda. It should be noted that the phrase used in the latest ASME Code Section XI for repair, replacement, and modification is “repair/replacement activities.”

SUMMARY OF ISSUE

Questions have arisen regarding the need for licensees to seek prior NRC review and approval to use the later editions and addenda of the ASME Code Section XI for repair/replacement activities, in accordance with the requirements of 10 CFR 50.55a(g)(4)(iv). The NRC is aware that some licensees may have used later editions and addenda of the ASME Code without prior NRC review and approval. Several licensees have expressed the view that because Code Case N-389-1 is applicable only to repair/replacement activities and because 10 CFR 50.55a(g)(4)(iv) only addresses inservice examination requirements, the prior NRC approval requirement of 10 CFR 50.55a(g)(4)(iv) does not apply to the use of Code Case N-389-1. Other licensees have expressed that there is an apparent conflict between 10 CFR 50.55a(g)(4)(iv) and 10 CFR 50.55a(b)(5) regarding the need for NRC approval when implementing Code Case N-389-1.

Paragraph 50.55a(b)(2) incorporates by reference those editions and addenda of the ASME Code Section XI, that the NRC finds acceptable, subject to certain limitations and modifications. Currently, paragraph 50.55a(b)(2) incorporates by reference the ASME Code Section XI from the 1970 edition through the 2000 addenda (Division 1).

Paragraph 50.55a(b)(5) incorporates by reference Regulatory Guide 1.147, Revision 13, including those Code Cases which the NRC finds acceptable. Paragraph 50.55a(b)(5) states that “...licensees may apply the ASME Boiler and Pressure Vessel Code Cases listed in Regulatory Guide 1.147 through Revision 13, without prior NRC approval...”

Paragraph 50.55a(g)(4) states, in part, that throughout the service life of a nuclear power facility, components must meet the requirements set forth in Section XI of editions of the ASME Code and addenda. The repair, replacement, and modification of plant components are not explicitly mentioned in 10 CFR 50.55a(g)(4) and associated subparagraphs. However, these activities are specifically mentioned in ASME Code Section XI, “Rules for Inservice Inspection of Nuclear Power Plant Components.” The NRC staff considers that these activities are not separate and distinct from, but are included under, inservice examinations. Therefore, the requirements of 10 CFR 50.55a(g)(4)(iv) are applicable to repair/replacement activities.

Paragraph 50.55a(g)(4)(iv) states specifically that inservice examination of components and system pressure tests may meet the requirements set forth in subsequent editions and addenda of the ASME Code provided that they are incorporated by reference in 10 CFR 50.55a(b), subject to the limitations and modifications listed in 10 CFR 50.55a(b) and subject to Commission approval. Portions of editions or addendum may be used provided that all related requirements of the respective editions or addenda are met.

The NRC finds no conflict between the provisions of Code Case N-389-1 and 10 CFR 50.55a(g)(4)(iv) because the Code Case is silent on the issue of prior NRC review and approval regarding the use of later editions and addenda of the ASME Code for repair/replacement activities. In addition, the primary purpose of Code Case N-389-1 is the ASME Code's response to licensees' inquiries regarding which editions and addenda of Section XI may be used as alternatives to those specified in the Owner's Inservice Inspection Program.

Moreover, with regard to the differences in requirements between 10 CFR 50.55a(g)(iv) and 10 CFR 50.55a(b)(5), the requirements in 10 CFR 50.55a(b)(5) apply to adopting and codifying Code Cases, whereas 10 CFR 50.55a(g)(4)(iv) specifies the overall inservice inspection requirements including requirement for repair/replacement activities. Therefore, the requirements in 10 CFR 50.55a(b)(5) are subordinated to the requirements in 10 CFR 50.55a(g)(4)(iv). The purpose of the NRC review and approval for the use of later ASME editions and addenda is to provide and monitor consistency in the use of the appropriate ASME editions and addenda in repair/replacement activities of nuclear plant components.

On the basis of the above discussion, the NRC concludes that licensees who wish to use provisions of subsequent editions and addenda of the ASME Code Section XI for activities, including repair/replacement activities (e.g., Code Case N-389-1), must receive prior NRC review and approval as required by 10 CFR 50.55a(g)(4)(iv).

BACKFIT DISCUSSION

This RIS requires no action or written response and is, therefore, not a backfit under 10 CFR 50.109. Consequently, the staff did not perform a backfit analysis.

FEDERAL REGISTER NOTIFICATION

A notice of opportunity for public comment on this RIS was not published in the *Federal Register* because it is informational and pertains to a staff position that does not depart from current regulatory requirements and practice.

SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT OF 1996

The NRC has determined that this action is not a new rule and therefore is not subject to the Small Business Regulatory Enforcement Fairness Act of 1996.

PAPERWORK REDUCTION ACT STATEMENT

This RIS does not contain an information collection request and therefore is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.).

CONTACT

Please direct any questions about this matter to the technical contact listed below or to the appropriate Office of Nuclear Reactor Regulation (NRR) project manager.

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Attachment: List of Recently Issues NRC Regulatory Issue Summaries

LIST OF RECENTLY ISSUED
NRC REGULATORY ISSUE SUMMARIES

Regulatory Issue Summary No.	Subject	Date of Issuance	Issued to
2004-15	Emergency Preparedness Issues: Post 9/11	10/18/2004	All holders of operating licenses for nuclear power reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.
2004-14	Focusing Resources in the Office of Nuclear Reactor Regulation as a Result of Review of Security Plan Changes	09/20/2004	All holders of operating licenses for nuclear power reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.
2004-13	Consideration of Sheltering in Licensee's Range of Protective Action Recommendations	08/02/2004	All holders of operating licenses for nuclear power reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.
2004-12	Clarification on Use of Later Editions and Addenda to the ASME OM Code and Section XI	07/28/2004	All holders of operating licenses for nuclear power reactors except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

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