

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, DC 20555-0001

January 21, 2003

**NRC REGULATORY ISSUE SUMMARY 2003-01
EXAMINATION OF DISSIMILAR METAL WELDS,
SUPPLEMENT 10 TO APPENDIX VIII OF
SECTION XI OF THE ASME CODE**

ADDRESSEES

All holders of operating licenses for nuclear power reactors.

INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to inform addressees of the NRC staff's position on the implementation of Supplement 10 to Appendix VIII, "Performance Demonstration for Ultrasonic Examination Systems," of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), as required by Title 10, Section 50.55a(g)(6)(ii)(C), of the *Code of Federal Regulations* [10 CFR 50.55a(g)(6)(ii)(C)]. Supplement 10 contains the qualification requirements for procedures, equipment, and personnel involved with examining dissimilar metal welds using ultrasonic techniques, which licensees were required to implement by November 22, 2002. This RIS requires no written response on the part of an addressee.

BACKGROUND INFORMATION

In a final rulemaking on September 22, 1999 (64 FR 51370), the NRC imposed a requirement for expedited implementation of Appendix VIII to Section XI of the ASME Code. That appendix contains several supplements, which licensees were to implement on a phased basis over a 3-year period, with Supplement 10 scheduled to be implemented by November 22, 2002. The NRC concluded that the expedited implementation of Appendix VIII was "... necessary to bring the facilities described into compliance with [General Design Criterion] GDC 14, 10 CFR Part 50, Appendix A, or similar provisions in the licensing basis for these facilities, and Criterion II, 'Quality Assurance Program,' and Criterion XVI, 'Corrective Actions,' of Appendix B to 10 CFR Part 50" (64 FR 51394).

Prior to November 22, 2002, the requirements for conducting dissimilar metal weld qualifications and examinations using ultrasonic techniques were stipulated in Appendix III to Section XI of the ASME Code. Since that date, however, these requirements are stipulated in Appendix VIII to Section XI of the ASME Code. A significant difference between these appendices is that Appendix III consists of prescriptive-based criteria, while Appendix VIII consists of performance-based criteria. This is important because the performance-based

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criteria substantially improve the ability of an examiner to detect and characterize flaws during ultrasonic examination of components and, thereby, provide for more reliable examination results.

On August 23, 2002, the Nuclear Energy Institute (NEI) informally made the NRC staff aware of the possibility that the industry might not be able to meet the implementation date for Supplement 10. On October 31, 2002, representatives of NEI met with the NRC staff and confirmed that the industry would not be able to meet the implementation date. In fact, the NEI representatives indicated that licensees had not yet qualified any procedures or personnel to meet the requirements of Supplement 10. The NEI further projected that the earliest any qualification could be completed was the end of November or December 2002. The NEI further stated that related uncertainties made it impossible to project with any degree of confidence when all facilities could comply with Supplement 10. The NEI suggested several alternatives for changing the implementation date, including the issuance of generic exemptions, direct final rulemaking, or the use of enforcement discretion.

SUMMARY OF ISSUE

The NRC staff has concluded that, as of November 22, 2002, facilities that do not have a program that implements Supplement 10 to Appendix VIII of Section XI of the ASME Code are noncompliant with 10 CFR 50.55a(g)(6)(ii)(C), irrespective of when the actual examination of dissimilar metal welds must be conducted. A program that implements Supplement 10 is considered to be one that has in place qualified procedures, equipment, and personnel—not one that merely references or stipulates the use of qualified procedures, equipment, and personnel.

The significance of this noncompliance (i.e., the failure to have a program in place by November 22, 2002, that implements Supplement 10) is such that enforcement action is not warranted. However, the failure to implement Supplement 10 when such examinations must be performed, either in the course of normal inservice inspection program requirements or to fulfill unanticipated examination needs, is considered safety significant and is a performance deficiency under the Reactor Oversight Process. System operability may be affected until the regulatory noncompliance has been remedied and all regulatory requirements are met, or appropriate regulatory relief is granted. Evaluation guidance on operability issues is provided in Generic Letter 91-18, "Information To Licensees Regarding Two NRC Inspection Manual Sections On Resolution of Degraded and Nonconforming Conditions and On Operability." However, the resolution of an operability issue does not negate the non-compliance with 10CFR50.55a(g)(6)(ii)(C).

BACKFIT DISCUSSION

This RIS imposes no new requirements and requires no action or written response. Therefore, this RIS does not constitute a backfit under 10 CFR 50.109, and the staff did not perform a backfit analysis.

FEDERAL REGISTER NOTIFICATION

A notice of opportunity for public comment was not published in the *Federal Register* because this RIS is informational.

PAPERWORK REDUCTION ACT STATEMENT

This RIS does not request any information collection, and, therefore, is not subject to the Paperwork Reduction Act.

If you have any questions about this RIS, please contact the person listed below or the appropriate project manager in the NRC's Office of Nuclear Reactor Regulation.

/RA/

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