

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

December 1, 1998

**NRC INFORMATION NOTICE 98-42: IMPLEMENTATION OF 10 CFR 50.55a(g) INSERVICE
INSPECTION REQUIREMENTS**

Addressees

All holders of operating licenses for nuclear power reactors.

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to alert addressees to certain aspects of requesting relief from American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) examinations that received less than "essentially 100 percent" coverage. ("Essentially 100 percent" examination is defined as more than 90 percent of the specified examination volume.) It is expected that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems. However, suggestions contained in this information notice are not NRC requirements; therefore, no specific action or written response is required.

Description of Circumstances

It became evident to the NRC staff while it was conducting inservice inspections (ISI) reviews of licensees' 90-day ISI reports that some licensees were unaware of, uncertain of, or had misinterpreted the Title 10 of the Code of Federal Regulations 50.55a(g)(4) (10 CFR 50.55a(g)(4)) requirements regarding the examination of components to the extent practical within the limitations of design, geometry, and materials of construction of the components. Licensees should be cognizant of 10 CFR 50.55a(g)(5)(iii) which requires submittal of requests for relief from paragraph 50.55a(g)(4) when complete examination coverage(s) is impractical. Because of the scope and extent of ISI examinations, significant planning is necessary to address the technical and regulatory issues associated with the examinations required by the ASME Code, to the extent practical, of Class 1, 2, and 3 systems and components.

This information notice contains a discussion of certain areas of misinterpretation that the NRC staff has dealt with in the implementation of the 10 CFR 50.55a(g)(4) rule.

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updated on 12/31/98

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Discussion

In 10 CFR 50.55a(g)(5)(iii), it is requested that requests for relief from limited examinations be submitted when it is impractical to complete the examination coverage requirements of Section XI of the ASME Code. Recent NRC reviews found that several licensees did not submit requests for relief from examinations of less than essentially 100 percent coverage. The licensees correctly interpreted 10 CFR 50.55a(g)(4) for Class 1, 2, and 3 components to mean that they were required to perform the ASME Code examinations to the extent practical. However, the licensees misinterpreted the requirement to mean that they were not required to submit requests for relief from examinations that received less than essentially 100 percent coverage because they had examined the component to the extent practical.

At least one licensee quoted 10 CFR 50.55a(g)(4) as a basis for not seeking relief when unable to obtain the required examination coverage. In 10 CFR 50.55a(g)(4) it is stated, in part, that "components. . . must meet the requirements. . . to the extent practical within the limitations of design, geometry and materials of construction of the components." However, when incomplete or partial ISI examination coverage required by the ASME Code is obtained, NRC relief is required pursuant to 10 CFR 50.55a(g)(5)(iii).

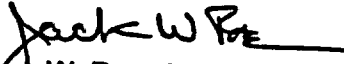
During discussions with the NRC staff regarding its review of a 90-day ISI summary report, it was determined that a licensee had obtained "essentially 100 percent" coverage for most examinations but had obtained coverage of 90 percent or less on several components. Contrary to the requirements of the rule, the licensee did not submit requests for relief to the NRC on the basis of impracticality before 1 year after the end of the effective interval as required by 10 CFR 50.55a(g)(5)(iv), until the NRC pointed out this omission.

"Essentially 100 Percent" Examination Standard

After many inquiries and interpretations, ASME issued ASME Code Case N-460, "Alternative Examination Coverage for Class 1 and 2 Welds," Section XI, Division 1, dated July 27, 1988. ASME Code Case N-460 states, in part, that "when the entire examination volume or area cannot be examined. . . a reduction in examination coverage . . . may be accepted provided the reduction in coverage for that weld is less than 10 percent. The NRC has adopted and further refined the definition of "essentially 100 percent" to mean "greater than 90 percent" in 10 CFR 50.55a(g)(6)(ii)(A)(2) for required examination coverage of reactor pressure vessel welds. This standard has been applied to all examinations of welds or other areas required by ASME Section XI.

Most licensees are finding that although the overall average examination coverage for all welds may be more than 90 percent, examination coverage for other individual welds may be substantially less than 90 percent. When a licensee is unable to examine "essentially 100 percent" of each weld, it must seek relief from the NRC in accordance with 10 CFR 50.55a(g)(5)(iii).

This information notice requires no specific action or written response. However, recipients are reminded that they are required to consider industry-wide operating experience (including NRC Information notices), where practical, when setting goals and performing periodic evaluations under 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants." If you have any questions about the information in this notice, please contact the technical contact listed below or the appropriate Office of Nuclear Reactor Regulation (NRR) project manager.


Jack W. Roe, Acting Director
Division of Reactor Program Management
Office of Nuclear Reactor Regulation

Technical contact: Thomas K. McLellan, NRR
301-415-2716
E-mail: tkm@nrc.gov

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**LIST OF RECENTLY ISSUED
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Information Notice No.	Subject	Date of Issuance	Issued to
98-41	Spurious Shutdown of Emergency Diesel Generators from Design Oversight	11/20/98	All holders of operating licenses for nuclear power reactors, except for those who have ceased operations and have certified that fuel has been permanently removed from the reactor vessel
98-40	Design Deficiencies Can Lead Reduced ECCS Pump Net Positive Suction Head During Design-Basis Accidents	10/26/98	All holders of operating licenses for nuclear power reactors, except those licensees who have permanently ceased operations and have certified that fuel has been permanently removed from the vessel
98-39	Summary of Fitness-for-Duty Program Performance Reports for Calendar Years 1996 and 1997	10/24/98	All holders of operating licenses for nuclear power reactors
98-38	Metal-Clad Circuit Breaker Maintenance Issued Identified By NRC Inspections	10/15/98	All holders of operating licenses for nuclear power reactors.
98-37	Eligibility of Operator License Applicants	10/01/98	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.
98-36	Inadequate or Poorly Controlled Non-Safety-Related Maintenance Activities Unnecessarily Challenged Safety Systems	9/18/98	All holders of operating licenses for nuclear power reactors

OL = Operating License
CP = Construction Permit

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Original signed by
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 Division of Reactor Program Management
 Office of Nuclear Reactor Regulation

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 301- 415-2716
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