

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

April 16, 2008

**NRC REGULATORY ISSUE SUMMARY 2005-20, REV. 1,
REVISION TO NRC INSPECTION MANUAL PART 9900 TECHNICAL GUIDANCE,
“OPERABILITY DETERMINATIONS & FUNCTIONALITY ASSESSMENTS FOR
RESOLUTION OF DEGRADED OR NONCONFORMING CONDITIONS ADVERSE TO
QUALITY OR SAFETY”**

ADDRESSEES

All holders of operating licenses for nuclear power reactors, including 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 inform licensees that it has revised NRC Inspection Manual Part 9900, Technical Guidance, “Operability Determinations & Functionality Assessments for Resolution of Degraded and Nonconforming Conditions Adverse to Quality or Safety (OD Process),” issued as the Attachment to RIS 2005-20, “Revision to Guidance Formerly Contained in NRC Generic Letter 91-18, ‘Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability,’ dated September 26, 2005. The revised inspection guidance clarifies Appendix C.11, “Flaw Evaluation” and Appendix C.12, “Operational Leakage From Code Class 1, 2, 3 Components” selected issues regarding operability determinations involving American Society of Mechanical Engineers (AMSE), Code Class 2 and 3 piping. This RIS requires no action or written response on the part of an addressee.

BACKGROUND INFORMATION

In the aforementioned OD Process, section 4.0, Operability Determination Process, the guidance specifies performing an *Immediate Determination of Operability* upon discovery of a degraded or nonconforming condition, followed by a *Prompt Determination of Operability* to gather supporting evidence (if necessary) that a reasonable expectation of operability exists. In Appendices C.11 and C.12 the NRC staff stated their expectation that licensees must declare piping components and the part of the system containing the component immediately inoperable upon identification of through-wall (TW) leakage. Identified TW leakage in a component is considered to be a degraded condition.

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The NRC staff expectation that was set forth in the OD Process guidance for assessing operability of ASME Code Class 2 and 3 piping is that the system containing the component with TW leakage is inoperable and licensees are to follow the technical specification (TS) action requirements while collecting information about the TW flaw and assessing the piping structural integrity. The guidance is consistent with TS guidance for ASME Code Class 1 piping and considers that evidence of leakage from a pressure boundary indicates the presence of a TW flaw and the inner diameter flaw may be large and cannot be determined based on surface breaking dimensions. This NRC staff expectation for assessing operability of ASME Code Class 2 and 3 piping is considered to be overly conservative by the industry.

SUMMARY OF ISSUE

Attached is a revision to NRC Inspection Manual, Part 9900, Technical Guidance, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse to Quality or Safety" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML073531346). The revision only applies to Appendices C.11 and C.12 guidance issued in September 2005 as an attachment to RIS 2005-20.

After RIS 2005-20, was issued, the industry expressed concerns regarding the default inoperability determination for ASME Code Class 2 and 3 piping because the NRC staff default decision establishes a potential shutdown scenario for any small leak in ASME Code Class 2 or 3 piping subject to TS. The industry concern with RIS 2005-20, was formally identified by a Nuclear Energy Institute (NEI) white paper on operational leakage sent to the NRC staff in May 2006.

Since the NRC staff received the NEI white paper, five public meetings were held on the industry concerns about the OD Process guidance in Appendices C.11 (Flaw Evaluation) and C.12 (Operational Leakage). The meeting topics included: differences between high-energy and moderate-energy system operability determinations; criteria for evaluating structural integrity; and ASME Code relief requests. Meeting summaries are available in the Agencywide Documents Access and Management System. The NRC staff discussed proposed wording changes in C.11 and C.12 at the last two public meetings to obtain industry and ASME comments. In response to these discussions, the NRC staff has reconsidered its inspection technical guidance. The revised OD Process guidance continues to address certain conditions that should be satisfied for any operability determination involving a Class 2 and 3 high-energy or moderate-energy system.

Accordingly, RIS 2005-20, Rev. 1, supersedes the guidance in RIS 2005-20 dated September 26, 2005 (ADAMS Accession No. ML052020424). The revised RIS addresses industry's concerns regarding default operability determinations by providing additional flexibility for licensees as well as appropriate guidance to the inspectors regarding actions needed to address potential safety concerns. The revised Part 9900 Technical Guidance also clarifies inspector guidance regarding appropriate criteria for evaluating structural integrity of degraded Class 2 and 3 components and clarifies the basis for licensee relief requests to address compliance with the regulations when components are determined to be degraded but operable.

BACKFIT DISCUSSION

RIS 2005, Rev. 1, revises the staff position that was previously established in Rev. 0 of this RIS (issued on September 26, 2005, Accession No. ML0520204240) related to piping flaw evaluation and responses to operational leakage for ASME Code Class 2 and 3 piping. This new staff position is a relaxation in the current position. Additionally, this relaxation is voluntary. Therefore, it is 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 this RIS is informational and pertains to a relaxation of a staff position that may be voluntarily adopted by addressees. Furthermore, NRC has worked closely with NEI, industry representatives, and members of the public over a period of time on the development of the documents referenced in this RIS, and NRC has solicited public comment at public meetings.

CONGRESSIONAL REVIEW ACT

The NRC has determined that this action is not subject to the Congressional Review Act.

PAPERWORK REDUCTION ACT STATEMENT

This RIS does not contain any information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). The information collection requirements referenced in Inspection Manual Part 9900 were approved by the Office of Management and Budget (OMB) approval number 3150-0011.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

CONTACT

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

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Attachment: NRC Inspection Manual Part 9900: Technical Guidance, "Operability Determinations & Functionality Assessments for Resolution of Degraded or Nonconforming Conditions Adverse To Quality or Safety"

Note: NRC generic communications may be found on the NRC public website, <http://www.nrc.gov>, under Electronic Reading Room/Document Collections.

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