

U.S. NUCLEAR REGULATORY COMMISSION

Draft Regulatory Guide: Issuance, Availability

The U.S. Nuclear Regulatory Commission (NRC) has issued for public comment a draft of a revised existing guide in the agency's Regulatory Guide Series. This series has been developed to describe and make available to the public such information as methods that are acceptable to the NRC staff for implementing specific parts of the NRC's regulations, techniques that the staff uses in evaluating specific problems or postulated accidents, and data that the staff needs in its review of applications for permits and licenses.

The draft regulatory guide, entitled "Guidance on Monitoring and Responding to Reactor Coolant System Leakage," is temporarily identified by its task number, DG-1173, which should be mentioned in all related correspondence.

General Design Criterion (GDC) 14, "Reactor Coolant Pressure Boundary," as set forth in Appendix A, "General Design Criteria for Nuclear Power Plants," to Title 10, Part 50, of the *Code of Federal Regulations* (10 CFR Part 50), "Domestic Licensing of Production and Utilization Facilities", requires that the reactor coolant pressure boundary (RCPB) shall be designed, fabricated, erected, and tested so as to have an extremely low probability of abnormal leakage, of rapidly propagating failure, and of gross rupture. As a result, these nuclear components are normally designed to the criteria established in Section III of the Boiler and Pressure Vessel Code promulgated by the American Society of Mechanical Engineers.

During the design phase, degradation-resistant materials are normally specified for reactor coolant system components. However, materials can degrade as a result of the complex interaction of the materials, the stresses they encounter, and the normal and upset operating environments in which they are used. Such material degradation could lead to the leakage of the reactor coolant. Consequently, GDC 30, "Quality of Reactor Coolant Pressure Boundary," of Appendix A to 10 CFR Part 50, requires that means shall be provided for detecting and, to the

extent practical, identifying the location of the source of reactor coolant leakage. Additionally, 10 CFR 50.55a, "Codes and Standards", requires the performance of inservice inspection and testing of nuclear power plant components. Thus, the concept of defense-in-depth is used to provide assurance that structural integrity of the RCPB is maintained. This guide describes methods that the staff of the U.S. Nuclear Regulatory Commission (NRC) considers acceptable for implementing these requirements, with regard to selecting reactor coolant leakage detection systems, monitoring for leakage, and responding to leakage. This guide applies to light-water cooled reactors.

The NRC staff is soliciting comments on Draft Regulatory Guide DG-1173. Comments may be accompanied by relevant information or supporting data, and should mention DG-1173 in the subject line. Comments submitted in writing or in electronic form will be made available to the public in their entirety through the NRC's Agencywide Documents Access and Management System (ADAMS). Personal information will not be removed from your comments. You may submit comments by any of the following methods.

Mail comments to: Rulemaking, Directives, and Editing Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Email comments to: NRCREP@nrc.gov. You may also submit comments via the NRC's rulemaking Web site at <http://ruleforum.llnl.gov>. Address questions about our rulemaking Web site to Carol A. Gallagher (301) 415-5905; email CAG@nrc.gov.

Hand-deliver comments to: Rulemaking, Directives, and Editing Branch, Office of Administration, U.S. Nuclear Regulatory Commission, 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. on Federal workdays.

Fax comments to: Rulemaking, Directives, and Editing Branch, Office of Administration, U.S. Nuclear Regulatory Commission at (301) 415-5144.

Requests for technical information about Draft Regulatory Guide DG-1173 may be directed to NRC Senior Program Manager, Makuteswara Srinivasan, at (301) 415-6356 or email MXS5@nrc.gov.

Comments would be most helpful if received by 60 days from issuance of FRN. Comments received after that date will be considered if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before this date. Although a time limit is given, comments and suggestions in connection with items for inclusion in guides currently being developed or improvements in all published guides are encouraged at any time.

Electronic copies of Draft Regulatory Guide DG-1173 are available through the NRC's public Web site under Draft Regulatory Guides in the Regulatory Guides document collection of the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/doc-collections/>. Electronic copies are also available in ADAMS (<http://www.nrc.gov/reading-rm/adams.html>), under Accession #ML071070410.

In addition, regulatory guides are available for inspection at the NRC's Public Document Room (PDR), which is located at 11555 Rockville Pike, Rockville, Maryland. The PDR's mailing address is USNRC PDR, Washington, DC 20555-0001. The PDR can also be reached by telephone at (301) 415-4737 or (800) 397-4205, by fax at (301) 415-3548, and by email to PDR@nrc.gov. Requests for single copies of draft or final guides (which may be reproduced) should be made in writing to the U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Reproduction and Distribution Services Section; by email to DISTRIBUTION@nrc.gov; or by fax to (301) 415-2289. Telephone requests cannot be accommodated.

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Dated at Rockville, Maryland, this 20th day of June, 2007.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION.

/RA/

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