

## U.S. NUCLEAR REGULATORY COMMISSION

## Final Regulatory Guide; Issuance, Availability

The U.S. Nuclear Regulatory Commission (NRC) has issued a revision to an 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.

Revision 1 of Regulatory Guide 8.38, entitled "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants," describes an acceptable program for implementing the requirements of Title 10, Part 20, of the Code of Federal Regulations (10 CFR Part 20), "Standards for Protection Against Radiation." In particular, 10 CFR 20.1101, "Radiation Protection Programs," requires licensees to develop and implement a radiation protection program appropriate to the scope of licensed activities and potential hazards. To augment that requirement, 10 CFR 20.2102, "Records of Radiation Protection Programs," requires licensees to document those radiation protection programs. An important aspect of such programs at nuclear power plants is the institution of a system of controls that includes procedures, training, audits, and physical barriers to protect workers against unplanned exposures in high and very high radiation areas. Toward that end, 10 CFR 20.1601 provides specific requirements applicable to controlling access to high radiation areas, while 10 CFR 20.1602 provides additional requirements to prevent unauthorized or inadvertent entry into very high radiation areas. Appendix A to the revised guide augments this guidance with recommended procedures for good operating practices for underwater diving operations in high and very high radiation areas. In addition, Appendix B summarizes past experience with very high and potentially very high radiation areas, so that pertinent historical information is readily accessible.

Dose rates in areas of nuclear power plants that are accessible to individuals can vary over several orders of magnitude. High radiation areas, where personnel can receive doses in excess of the regulatory limits in a relatively short time, require special controls. Very high radiation areas require much stricter monitoring and controls, because failure to adequately implement effective radiological controls can result in radiation doses that result in a significant health risk. Thus, it is important that licensees have effective programs for controlling access to high and very high radiation areas because of the potential for overexposure.

The primary purpose of this revision is to clarify the terminology related to the physical barriers that licensees could use to prevent unauthorized personnel access to high and very high radiation areas. The original version of Regulatory Guide 8.38 used the term “inadvertent entry” with two different connotations. As used in Section 1.5, “Physical Controls,” the term was intended to connote “not a willful violation.” In several other sections, however, “inadvertent entry” was used to mean “an accidental, or unintended, entry.” This disparity led to inconsistent readings of the staff’s regulatory position by licensees and other stakeholders. Consequently, in preparing this revision, the NRC staff rewrote Section 1.5 to eliminate the use of the term “inadvertent entry,” and provide additional guidance on the acceptability of physical barriers used to control access to high radiation areas.

The staff also revised Section 1.6, “Shielding,” and Section 4.2, “Materials,” to explicitly state the staff’s regulatory positions, which were only implied in the original version. In addition, the staff updated Appendix B to include recent references that discuss industry experiences with high and very high radiation areas.

Revision 1 to Regulatory Guide 8.38 does not change previous staff positions. Therefore, this revision does not constitute a backfit, as defined in 10 CFR 50.109.

The NRC previously solicited public comment on this revised guide by publishing a *Federal Register* notice (70 FR 58490) concerning Draft Regulatory Guide DG-8028 on October 6, 2005. Following the closure of the public comment period on December 5, 2005, the staff considered all stakeholder comments in the course of preparing Revision 1

of Regulatory Guide 8.38. The staff's responses to all comments received are available in the NRC's Agencywide Documents Access and Management System (ADAMS) at <http://www.nrc.gov/reading-rm/adams.html>, under Accession #ML061350247.

The NRC staff encourages and welcomes comments and suggestions in connection with improvements to published regulatory guides, as well as items for inclusion in regulatory guides that are currently being developed. You may submit comments by any of the following methods.

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

Hand-deliver comments to: Rules and Directives 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: Rules and Directives Branch, Office of Administration, U.S. Nuclear Regulatory Commission at (301) 415-5144.

Requests for technical information about Revision 1 of Regulatory Guide 8.38 may be directed to Harriet Karagiannis at (301) 415-6377 or by email to [HXK@nrc.gov](mailto:HXK@nrc.gov).

Regulatory guides are available for inspection or downloading through the NRC's public Web site in the Regulatory Guides document collection of the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/doc-collections/>. Electronic copies of Revision 1 of Regulatory Guide 8.38 are also available in the NRC's Agencywide Documents Access and Management System (ADAMS) at <http://www.nrc.gov/reading-rm/adams.html>, under Accession #ML061350096.

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](mailto:PDR@nrc.gov). Requests for single copies of draft or final guides (which may be reproduced) or for placement on an automatic distribution list for single copies of future draft guides in specific divisions 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](mailto:DISTRIBUTION@nrc.gov); or by fax to (301) 415-2289. Telephone requests cannot be accommodated.

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(5 U.S.C. 552(a))

Dated at Rockville, Maryland, this 31<sup>st</sup> day of May, 2006.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION,

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Office of Nuclear Regulatory Research