

## U.S. NUCLEAR REGULATORY COMMISSION

## Draft Regulatory Guide: Issuance, Availability

The U.S. Nuclear Regulatory Commission (NRC) has issued for public comment a draft revision of 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.

The draft Revision 1 of Regulatory Guide 8.38, entitled "Control of Access to High and Very High Radiation Areas in Nuclear Power Plants," is temporarily identified by its task number, DG-8028, which should be mentioned in all related correspondence. Like its predecessors, this proposed revision 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 proposed 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 proposed 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 current version of Regulatory Guide 8.38 uses 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 has 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 two additional sections of the guide to explicitly state regulatory positions that are implied in the current version. Section 1.6, “Shielding,” is revised to clarify that monitors with local alarms are not necessary where the removal of shielding does not result in dose rates greater than 1,000 mrem/hr (10 mSv/hr) at 30 cm from the source. Also, Section 4.2, “Materials,” is revised to clarify that appropriate controls are required when diving operations allow access to high and/or very high radiation areas in the spent fuel pool. In addition, the staff

updated Appendix B to include recent references that discuss industry experiences with high and very high radiation areas.

The proposed revision 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 staff is soliciting comments on Draft Regulatory Guide DG-8028, and comments may be accompanied by relevant information or supporting data. Please mention DG-8028 in the subject line of your comments. Comments on this draft regulatory guide 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: Rules and Directives Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Email comments to: [NRCREP@nrc.gov](mailto: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](mailto:CAG@nrc.gov).

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 Draft Regulatory Guide DG-8028 may be directed to Harriet Karagiannis at (301) 415-6377 or by email to [H XK@nrc.gov](mailto:H XK@nrc.gov).

Comments would be most helpful if received by **December 5, 2005**. 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 the draft regulatory guide 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 the NRC's Agencywide Documents Access and Management System (ADAMS) at <http://www.nrc.gov/reading-rm/adams.html>, under Accession #ML052590173. Note, however, that the NRC has temporarily limited public access to ADAMS so that the agency can complete security reviews of publicly available documents and remove potentially sensitive information. Please check the NRC's Web site for updates concerning the resumption of public access to ADAMS.

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 28<sup>th</sup> day of September, 2005.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION,

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