

**NUCLEAR REGULATORY COMMISSION**

**[NRC-2013-0234]**

**Monitoring Criteria and Methods to Calculate Occupational Radiation Doses**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Draft regulatory guide; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing for public comment draft regulatory guide (DG), DG-8031, "Monitoring Criteria and Methods to Calculate Occupational Radiation Doses." This guide describes methods that the NRC staff considers acceptable for licensees to use to determine monitoring criteria and calculate occupational radiation doses.

**DATES:** Submit comments by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION]**. Comments received after this 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.

**ADDRESSES:** You may submit comment by any of the following methods (unless this document describes a different method for submitting comments on a specific subject):

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2013-0234**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual(s) listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **Mail comments to:** Cindy Bladey, Chief, Rules, Announcements, and Directives Branch (RADB), Office of Administration, Mail Stop: 3WFN, 06-44M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

For additional direction on accessing information and submitting comments, see “Accessing Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** Harriet Karagiannis, telephone: 301-251-7477, e-mail: [Harriet.Karagiannis@nrc.gov](mailto:Harriet.Karagiannis@nrc.gov), or Doris Lewis, telephone: 301-251-7559, e-mail: [Doris.Lewis@nrc.gov](mailto:Doris.Lewis@nrc.gov). Both of the Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

## **SUPPLEMENTARY INFORMATION:**

### **I. Accessing Information and Submitting Comments**

#### **A. Accessing Information**

Please refer to Docket ID **NRC-2013-0234** when contacting the NRC about the availability of information regarding this document. You may access publicly-available information related to this action by the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2013-0234**.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

You may access publicly-available documents online in the NRC Library at

<http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search.](#)" For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The draft regulatory guide is available electronically in ADAMS under Accession No. ML13168A095. The regulatory analysis may be found in ADAMS under Accession No. ML13168A096.

Regulatory guides are not copyrighted, and NRC approval is not required to reproduce them.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

## B. Submitting Comments

Please include Docket ID **NRC-2013-0234** in the subject line of your comment submission, in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC posts all comment submissions at <http://www.regulations.gov> as well as entering the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

## **II. Additional Information**

The NRC is issuing for public comment a draft guide in the NRC's "Regulatory Guide" series. This series was 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.

This draft regulatory guide, entitled, "Monitoring Criteria and Methods to Calculate Occupational Radiation Doses," is temporarily identified by its task number, DG-8031. The DG-8031 is proposed revision 1 of Regulatory Guide (RG) 8.34, dated July 1992.

The NRC issued RG 8.34 in 1992, to provide guidance on acceptable methods of monitoring and calculating occupational radiation doses. On December 4, 2007 (72 FR 68043), the NRC revised the definition of total effective dose equivalent (TEDE) in part 20 of Title 10 of the *Code of Federal Regulations* (10 CFR), "Standards for Protection Against Radiation," and in 10 CFR part 50, "Domestic Licensing of Production and Utilization Facilities." Previously, the definition of the TEDE was the sum of the deep dose equivalent (DDE) and the committed

effective dose equivalent (CEDE), DDE to account for external exposure and CEDE to account for internal exposure. In the revised definition of TEDE, DDE was replaced with the effective dose equivalent for external exposure (EDEX).

As a result of the changed definition of TEDE, RG 8.34 is inconsistent with the current regulatory rule. Therefore, RG 8.34 needs to be revised to reflect the rule change. In addition, the NRC staff has incorporated guidance on how to calculate occupational radiation doses for wound contamination to the extremities into this draft revision of RG 8.34.

### **III. Backfitting and Issue Finality**

This draft regulatory guide, if finalized, would not constitute backfitting as defined in 10 CFR 50.109 (the Backfit Rule) and would not be otherwise inconsistent with the issue finality provisions in 10 CFR part 52, "Licenses, Certifications and Approvals for Nuclear Power Plants." As discussed in the "Implementation" section of this draft regulatory guide, the NRC has no current intention to impose this draft regulatory guide on holders of current operating licenses, early site permits or combined licenses, unless this draft regulatory guide becomes part of the licensing basis for the facility.

If this draft regulatory guide is finalized, the NRC may apply the revised regulatory guide to applications for operating licenses, early site permits and combined licenses docketed by the NRC as of the date of issuance of the revised regulatory guide, as well as to future applications for operating licenses, early site permits and combined licenses submitted after the issuance of the revised regulatory guide. Such action would not constitute backfitting as defined in 10 CFR 50.109(a)(1) nor be otherwise inconsistent with the applicable issue finality provision in 10 CFR

Part 52, because such applicants or potential applicants are not within the scope of entities protected by the Backfit Rule or the relevant issue finality provisions in part 52.

Dated at Rockville, Maryland, this 3<sup>rd</sup> day of October, 2013.

For the Nuclear Regulatory Commission.

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