

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 new 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 "Guidelines for Lightning Protection for Nuclear Power Plants," is temporarily identified by its task number, DG-1137, which should be mentioned in all related correspondence. This proposed regulatory guide offers guidance for NRC licensees and applicants to use in developing and implementing practices that the staff finds acceptable for complying with the agency's regulatory requirements in Criterion 2, "Design Bases for Protection Against Natural Phenomena," as it appears 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). Specifically, Criterion 2 requires, in part, that nuclear power plant (NPP) structures, systems, and components (SSCs) that are important to safety must be designed to withstand the effects of natural phenomena without losing their capability to perform their respective safety functions.

While the regulations address lightning protection for safety-related electrical equipment, they do not explicitly provide guidance concerning the design and installation of lightning protection systems (LPSs) to ensure that electrical transients resulting from lightning phenomena do not cause spurious operation safety-related systems or render them inoperable. As proposed, DG-1137 would augment the regulations by establishing explicit guidance that is consistent with LPS design and installation practices that are currently applied throughout the commercial power industry.

Toward that end, the NRC staff has selected for endorsement a total of four standards issued by the Institute of Electrical and Electronics Engineers (IEEE), which taken together, provide comprehensive lightning protection guidance for nuclear power plants. Specifically, the four standards are IEEE Std. 665-1995 (2001 revision), *IEEE Guide for Generating Station Grounding*, IEEE Std. 666-1991, *IEEE Design Guide for Electrical Power Service Systems for Generating Stations*, IEEE Std. 1050-1996, *IEEE Guide for Instrumentation and Control Equipment Grounding in Generating Stations*, and IEEE Std. C62.23-1995 (2001 revision), *IEEE Application Guide for Surge Protection of Electric Generating Plants*.

The NRC staff is soliciting comments on Draft Regulatory Guide DG-1137, and comments may be accompanied by relevant information or supporting data. Please mention DG-1137 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. 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: 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-1137 may be directed to Christina E. Antonescu at (301) 415-6792 or via email to CEA1@nrc.gov.

Comments would be most helpful if received by **April 20, 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 #ML050480101. Note, however, that the NRC has temporarily suspended 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. 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; or by fax to (301) 415-2289. Telephone requests cannot be accommodated.

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

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

Dated at Rockville, Maryland, this 17th day of February, 2005.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION,

/RA/

Michael E. Mayfield, Director
Division of Engineering Technology
Office of Nuclear Regulatory Research