

**NUCLEAR REGULATORY COMMISSION**

**[NRC-2020-0245]**

**Environmental Qualification of Certain Electrical Equipment Important to Safety  
for Nuclear Power Plants**

**AGENCY:** Nuclear Regulatory Commission.

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

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing for public comment a draft regulatory guide (DG), DG-1361, "Environmental Qualification of Certain Electrical Equipment Important to Safety for Nuclear Power Plants." This draft guide is proposed revision 2 of regulatory guide (RG) 1.89 of the same name. The proposed revision describes an approach that is acceptable to the staff of the NRC to meet regulatory requirements for environmental qualification (EQ) of certain electric equipment important to safety for nuclear power plants. The previous revision of RG 1.89 was issued in June 1984 and endorsed the use of Institute of Electrical and Electronic Engineers (IEEE) Standard (Std.) 323-1974. This proposed revision incorporates additional information regarding the dual logo International Electrotechnical Commission (IEC)/IEEE Std. 60780-323, "Nuclear Facilities—Electrical Equipment Important to Safety—Qualification," Edition 1, 2016-02.

**DATES:** Submit comments by **[INSERT DATE 60 DAYS AFTER THE DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. 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 comments by any of the following methods; however, the NRC encourages electronic comment submission through the **Federal Rulemaking Web Site**:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2020-0245**. Address questions about Docket IDs in Regulations.gov to Jennifer Borges; telephone: 301-287-9221; e-mail: Jennifer.Borges@nrc.gov. For technical questions, contact the individuals listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **Mail comments to:** Office of Administration, Mail Stop: TWFN-7A06, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. ATTN: Program Management, Announcements and Editing Staff.

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

**FOR FURTHER INFORMATION CONTACT:** Matthew McConnell, Office of Nuclear Reactor Regulation, telephone: 301-415-1597, e-mail: Matthew.McConnell@nrc.gov, and Michael Eudy, Office of Nuclear Regulatory Research, telephone: 301-415-3104, e-mail: Michael.Eudy@nrc.gov. Both are staff of the U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

## **SUPPLEMENTARY INFORMATION:**

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

#### **A. Obtaining Information**

Please refer to Docket ID **NRC-2020-0245** when contacting the NRC about the

availability of information for this action. You may obtain publicly available information related to this action by any of the following methods:

- **Federal Rulemaking Web site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2020-0245**.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, 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).

- **Attention:** The PDR, where you may examine and order copies of public documents is currently closed. You may submit your request to the PDR via e-mail at [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov) or call 1-800-397-4209 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

#### B. Submitting Comments

The NRC encourages electronic comment submission through the **Federal Rulemaking Web Site** (<https://www.regulations.gov>). Please include Docket ID **NRC-2020-0245** in your comment submission.

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 <https://www.regulations.gov> as well as enter 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 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 methods that are acceptable to the NRC staff for implementing specific parts of the agency's regulations, to explain techniques that the staff uses in evaluating specific issues or postulated events, and to describe information that the staff needs in its review of applications for permits and licenses.

The DG, titled, "Environmental Qualification of Certain Electrical Equipment Important to Safety for Nuclear Power Plants," is temporarily identified by its task number, DG-1361 (ADAMS Accession No. ML20183A423). DG-1361 is proposed revision 2 of RG 1.89. This revision of the guide (revision 2) endorses, with clarifications, the "English" portion of the dual logo IEC/ IEEE Std. 60780-323, Edition 1, 2016-02 as a method acceptable to the NRC for meeting the regulatory requirements for EQ of certain electric equipment important to safety for nuclear power plants. This DG applies to licensees and applicants subject to title 10 of the *Code of Federal Regulations* (10 CFR) part 50, "Domestic Licensing of Production and Utilization Facilities," and 10 CFR part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants."

The staff is also issuing for public comment a draft regulatory analysis (ADAMS Accession No. ML20192A230). The staff develops a regulatory analysis to assess the value of issuing or revising a regulatory guide as well as alternative courses of action.

### **III. Backfitting, Forward Fitting, and Issue Finality**

DG-1361, if finalized, would provide the most recent guidance acceptable to the NRC staff for compliance with 10 CFR 50.49, “Environmental qualification of electrical equipment important to safety for nuclear power plants” for certain electrical equipment important to safety. Issuance of DG-1361, if finalized, would not constitute backfitting, as that term is defined in 10 CFR 50.109, “Backfitting,” and as described in NRC Management Directive 8.4, “Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests”; constitute forward fitting, as that term is defined and described in Management Directive 8.4; or affect the issue finality of any approval issued under 10 CFR part 52. As explained in DG-1361, applicants and licensees would not be required to comply with the positions set forth in DG-1361.

### **IV. Specific Requests for Comments**

In addition to the general request for comments on DG-1361, the NRC is also seeking specific comments that address the following question:

In this proposed RG revision, the staff has updated the current version of the RG (Revision 1) to endorse, with clarifications, IEC/IEEE Std. 60780-323, Edition 1, 2016-2. The current version of the RG (Revision 1) endorsed IEEE Std. 323-1974, “IEEE Standard for Qualifying Class IE Equipment for Nuclear Power Generating Stations.” As stated in the Implementation section of the DG, the staff does not intend to use this RG revision to support NRC staff actions in a manner that would constitute backfitting or forward fitting or affect the issue finality of an approval under 10 CFR part 52. Further, licensees or applicants are not required to comply with the RG. However, does the staff’s proposed endorsement of IEEE Std. 60780-323, Edition 1, 2016-02 raise any

concerns related to backfitting, forward fitting, or issue finality that the staff has not considered?

Dated: December 11, 2020.

For the Nuclear Regulatory Commission.

***/RA/***

Meraj Rahimi, Chief,  
Regulatory Guidance and Generic Issues  
Branch,  
Division of Engineering,  
Office of Nuclear Regulatory Research.