

**NUCLEAR REGULATORY COMMISSION**

**[NRC-2021-0047]**

**Plant-Specific, Risk-Informed Decisionmaking: Inservice Testing**

**AGENCY:** Nuclear Regulatory Commission.

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

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing for public comment Revision 1 to draft regulatory guide (DG), DG-1286, "Plant-Specific, Risk-Informed Decisionmaking: Inservice Testing." This DG is proposed Revision 1 of RG 1.175, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Inservice Testing." It has been revised to incorporate additional information since Revision 0 was issued, particularly information to be consistent with the terminology and defense-in-depth philosophy provided in RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," as well as to endorse a standard by the American Society of Mechanical Engineers Code for Operations and Maintenance of Nuclear Power Plant (OM Code).

**DATES:** Submit comments by **May 6, 2021**. 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-2021-0047**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; e-mail: Stacy.Schumann@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-7-A60M, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Program Management, Announcements and Editing Staff.

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

**FOR FURTHER INFORMATION CONTACT:** Zeechung Wang, telephone: 301-415-1686, email: Zeechung.Wang@nrc.gov and Harriet Karagiannis, telephone: 301-415-2493, email: Harriet.Karagiannis@nrc.gov. Both are staff of the Office of Nuclear Regulatory Research, 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-2021-0047** when contacting the NRC about the availability of information regarding 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-2021-0047**.

- **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 or 301-415-4737, 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-2021-0047** 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 will post all comment submissions at <https://www.regulations.gov> as well as enters 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 DG 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.

This DG, identified by its task number, Revision 1 to DG-1286, titled, "Plant-Specific, Risk-Informed Decisionmaking: Inservice Testing," is a proposed Revision 1 of RG 1.175 (ADAMS Accession No. ML19240B371). This proposed revision of RG 1.175 (Revision 1) describes an approach that is acceptable to the staff of the NRC for developing an alternative request under paragraph 50.55a(z)(1) of title 10 of the *Code of Federal Regulations* (10 CFR) to implement a risk-informed inservice testing (RI-IST) programs and supplements the guidance provided in RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis" (ADAMS Accession No. ML17317A256). It updates the defense-in-depth philosophy to be consistent with the philosophy described in RG 1.174. RG 1.174 was revised in 2018 to expand the meaning of, and the process for, assessing defense-in-depth considerations. Specifically, this proposed revision of RG 1.175 references the defense-in-depth guidance in RG 1.174 in several staff regulatory positions.

Additionally, the staff revised this guide to (1) adopt the term "PRA acceptability," and related phrasing variants, instead of terms such as "PRA quality," "PRA technical adequacy," and "technical adequacy" to describe the appropriateness of the probabilistic risk assessment (PRA) used to support risk-informed licensing submittals; (2) update Regulatory Position C.2.3, "Probabilistic Risk Assessment," of this RG to be consistent with Section C.2.3 in RG 1.174, which provides specific considerations with respect to

determining the acceptability of the PRA used in risk-informed decisionmaking; and (3) incorporate guidance related to the OM Code incorporated by reference in 10 CFR 50.55a for the inservice testing of pumps and valves at commercial nuclear power plants.

The staff is also issuing for public comment a draft regulatory analysis (ADAMS Accession No. ML19240B374). 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**

RG 1.175, Revision 1, would provide updated guidance for power reactor applicants and licensees regarding acceptable methods to the staff of the NRC for developing RI-IST programs and supplements the guidance provided in RG 1.174. Issuance of this RG in final form would not constitute backfitting or forward fitting or affect issue finality as further discussed below.

The staff does not intend to impose the positions represented in the draft RG (if finalized) in a manner that would constitute backfitting or affect the issue finality of a part 52 approval. If, in the future, the staff seeks to impose a position in the draft RG (if finalized) in a manner that constitutes backfitting or does not provide issue finality as described in the applicable issue finality provision, then the staff would need to address the backfit rule or the criteria for issue finality as described in the applicable issue finality provision.

The staff does not intend to impose the positions represented in the draft RG (if finalized) in a manner that would constitute forward fitting. If, in the future, the staff seeks to impose a position in the draft RG (if finalized) in a manner that constitutes forward fitting, then the staff would need to address the forward fitting criteria in Management Directive 8.4, "Management of Backfitting, Forward Fitting, Issue Finality,

and Information Requests” (ADAMS Accession No. ML18093B087).

Dated: April 1, 2021.

For the Nuclear Regulatory Commission.

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