

**NUCLEAR REGULATORY COMMISSION**

**[NRC-2021-0087]**

**Preparing Probabilistic Fracture Mechanics Submittals**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Regulatory guide; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing a new Regulatory Guide (RG) 1.245 (Revision 0), "Preparing Probabilistic Fracture Mechanics Submittals" and accompanying NUREG/CR-7278, "Technical Basis for the use of Probabilistic Fracture Mechanics in Regulatory Applications." This RG describes a framework to develop the contents of a licensing submittal that the staff of the NRC considers acceptable when performing probabilistic fracture mechanics (PFM) analyses in support of regulatory applications. The NUREG provides the technical basis for RG 1.245.

**DATES:** Revision 0 to RG 1.245 is available on **January 26, 2022**.

**ADDRESSES:** Please refer to Docket ID **NRC-2021-0087** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2021-0087**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email: Stacy.Schumann@nrc.gov. For technical questions, contact the individuals listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **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 email to [PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov). The ADAMS accession number for each document referenced (if it is available in ADAMS) is provided the first time that it is mentioned in this document.

- **NRC’s PDR:** You may examine and purchase copies of public documents, by appointment, at the NRC’s Public Document Room (PDR), Room P1 B35, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852. To make an appointment to visit the PDR, please send an email to [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. (ET), Monday through Friday, except Federal holidays.

Revision 0 to RG 1.245, the associated regulatory analysis, and NUREG/CR-7278 may be found in ADAMS under Accession Nos. ML21334A158, ML21034A261, and ML22014A406, respectively.

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**FOR FURTHER INFORMATION CONTACT:** Patrick Raynaud, telephone: 301-145-1987, email: [Patrick.Raynaud@nrc.gov](mailto:Patrick.Raynaud@nrc.gov) and Kyle Song, telephone: 301-415-3612, email: [Kyle.Song@nrc.gov](mailto:Kyle.Song@nrc.gov). Both are staff in the Office of Nuclear Regulatory Research at the U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

**SUPPLEMENTARY INFORMATION:**

**I. Discussion**

The NRC is issuing a new guide in the NRC’s “Regulatory Guide” series. This series was developed to describe and make available to the public information regarding

methods that are acceptable to the NRC staff for implementing specific parts of the agency's regulations, techniques that the NRC staff uses in evaluating specific issues or postulated events, and data that the NRC staff needs in its review of applications for permits and licenses.

RG 1.245 was issued with a temporary identification of Draft Regulatory Guide, DG-1382, ADAMS Accession No. ML21034A328.

## **II. Additional Information**

The NRC published a notice of the availability of DG-1382 in the *Federal Register* on September 23, 2021 (86 FR 52927) for a 30-day public comment period. The public comment period closed on October 25, 2021. Public comments and the staff responses to the public comments on DG-1382 are available in ADAMS under Accession No. ML21306A292.

## **III. Congressional Review Act**

This RG is a rule as defined in the Congressional Review Act (5 U.S.C. 801-808). However, the Office of Management and Budget has not found it to be a major rule as defined in the Congressional Review Act.

## **IV. Backfitting and Issue Finality**

RG 1.245 and NUREG/CR-7278 do not constitute backfitting as defined in section 50.109 of title 10 of the *Code of Federal Regulations* (10 CFR), "Backfitting," and as described in NRC Management Directive (MD) 8.4, "Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests;" do not constitute forward fitting as that term is defined and described in MD 8.4; and do not affect the issue finality of any approval issued under 10 CFR part 52. As explained in RG 1.245, applicants and licensees are not be required to comply with the positions set forth in the RG.

Dated: January 20, 2022.

For the Nuclear Regulatory Commission.

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Meraj Rahimi, Chief,  
Regulatory Guide and Programs  
Management Branch,  
Division of Engineering,  
Office of Nuclear Regulatory Research.