

**NUCLEAR REGULATORY COMMISSION**

**[NRC-2021-0065]**

**Fresh and Spent Fuel Pool Criticality Analyses**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Regulatory guide; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing a new Regulatory Guide (RG) 1.240, "Fresh and Spent Fuel Pool Criticality Analyses". This regulatory guide (RG) describes an approach that the staff of the U.S. Nuclear Regulatory Commission (NRC) considers acceptable to demonstrate that NRC regulatory requirements are met for subcriticality of fuel assemblies stored in fresh fuel vaults and spent fuel pools at light-water reactor (LWR) power plants. It endorses, with clarifications and exceptions, the Nuclear Energy Institute (NEI) guidance document NEI 12 16, "Guidance for Performing Criticality Analyses of Fuel Storage at Light Water Reactor Power Plants," Revision 4.

**DATES:** RG 1.240 is available on **03/10/2021**

**ADDRESSES:** Please refer to Docket ID NRC-2021-0065 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 Web Site:** Go to <https://www.regulations.gov> and search for Docket ID NRC-2021-0065. 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 individual(s) 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 e-mail 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.

- **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.

RG 1.240 and the regulatory analysis may be found in ADAMS under Accession Nos. ML20356A127 and ML20205L563, respectively.

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**FOR FURTHER INFORMATION CONTACT:** Kent Wood, Office of Nuclear Reactor Regulation, telephone: (301) 415-4120, e-mail: [Kent.Wood@nrc.gov](mailto:Kent.Wood@nrc.gov) and Mike Eudy, Office of Nuclear Regulatory Research, telephone: (301)-415-3104, e-mail: [Michael.Eudy@nrc.gov](mailto:Michael.Eudy@nrc.gov). Both are staff of 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.

## **II. Additional Information**

RG 1.240 was issued with a temporary identification of Draft Regulatory Guide, (DG)-1373. The NRC published a notice of the availability of DG-1373 in the *Federal Register* on September 8, 2020 (85 FR 55522) for a 45-day public comment period. The public comment period closed on October 23, 2020. Public comments on DG-1373 and the staff responses to the public comments are available under ADAMS under Accession No. ML20356A123.

## **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, Forward Fitting and Issue Finality**

New Regulatory Guide (RG) 1.240 does not constitute backfitting as defined in 10 CFR 50.109, "Backfitting," and as described in NRC Management Directive (MD) 8.4, "Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests"; constitute forward fitting as that term is defined and described in MD 8.4; or affect the issue finality of any approval issued under 10 CFR part 52. As explained in new RG 1.240, applicants and licensees would not be required to comply with the positions set forth in the RG.

Dated: March 4, 2021.

For the Nuclear Regulatory Commission.

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