



## NUCLEAR REGULATORY COMMISSION

### 10 CFR Part 50

[Docket No. PRM-50-75; NRC-2002-0018]

#### Large Break Loss-of-Coolant Accident Redefinition

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Petition for rulemaking; denial.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking dated February 6, 2002, submitted by Anthony R. Pietrangelo on behalf of the Nuclear Energy Institute, due to the discontinuation of the associated rulemaking.

**DATES:** As of [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*], the docket for PRM-50-75 is closed.

**ADDRESSES:** Please refer to Docket ID NRC-2002-0018 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-2002-0018. Address questions about NRC dockets to Dawn Forder; telephone: 301-415-3407; e-mail: [Dawn.Forder@nrc.gov](mailto:Dawn.Forder@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 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 the SUPPLEMENTARY INFORMATION section.

- **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 email at 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.

**FOR FURTHER INFORMATION CONTACT:** Yanelly Malave, telephone: 301-415-1519; e-mail: Yanelly.Malave@nrc.gov; or Robert Beall, telephone: 301-415-3874; e-mail: Robert.Beall@nrc.gov. Both are staff of the Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

Title 10 of the *Code of Federal Regulations* (10 CFR) 2.802, "Petition for rulemaking—requirements for filing," provides an opportunity for any interested person to petition the Commission to issue, amend, or rescind any regulation. On February 6, 2002, Anthony R. Pietrangelo, on behalf of the Nuclear Energy Institute (petitioner), submitted a petition for rulemaking requesting that the NRC amend its regulations to allow licensees to use an alternative to the double-ended guillotine break of the largest pipe in the reactor coolant system in emergency core cooling system (ECCS) evaluation models (ADAMS Accession No. ML082460625). The NRC docketed the petition as PRM-50-75, and on April 8, 2002, published a notice of docketing in the *Federal Register* and requested public comment (67 FR 16654). The comment period closed on June 24, 2002, and the NRC received 18 comment letters (ADAMS Accession No. ML022390515).

After evaluating the merits of the petition and the public comments, the NRC determined that the issues raised in PRM-50-75 would be considered in the ongoing "Risk-Informed Redefinition of Large Break Loss-of-Coolant Accident (LOCA) Emergency Core Cooling System (ECCS) Requirements" rulemaking. On November 6, 2008, the NRC published a document in the *Federal Register* (73 FR 66000) stating that

the NRC would address the substantive comments filed in PRM-50-75 as part of that rulemaking.

## II. Discussion

### A. Discontinuation of the Rulemaking

On December 10, 2010, the NRC staff provided the Commission SECY-10-0161, "Final Rule: Risk-Informed Changes to Loss-of-Coolant Accident Technical Requirements (10 CFR 50.46a)(RIN 3150-AH29)." Subsequent to the accident at Fukushima Dai-Ichi Nuclear Plant in March of 2011, the NRC staff requested Commission approval to withdraw the draft final rule during its evaluation of Fukushima Near-Term Task Force Recommendation 1 regarding the development of a new risk-informed regulatory framework from SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following The Events in Japan," and the recent publication of NUREG-2150, "A Proposed Risk Management Regulatory Framework."

The staff stated that:

Although the staff believes that the draft final 10 CFR 50.46a rule is an appropriate and well-founded approach to risk-inform the NRC's emergency core cooling requirements, the staff requests that SECY-10-0161 be withdrawn from Commission consideration so that it may be resubmitted later after the staff has completed its regulatory framework evaluation. When the staff establishes its recommended approach, it will re-evaluate the draft final 10 CFR 50.46a rule to ensure its compatibility with the recommended regulatory framework. Based on the outcome of the compatibility evaluation and the completion of any necessary changes, the staff will re-submit the draft final 10 CFR 50.46a rule with or shortly after providing its regulatory framework recommendation to the Commission.<sup>1</sup>

In SECY-16-0009, "Recommendations Resulting from the Integrated Prioritization and Re-Baselining of Agency Activities" (ADAMS Accession No. ML16028A189) dated January 31, 2016, the NRC staff requested Commission approval of work to be shed, deprioritized, or performed with fewer resources. One of the items to be discontinued was the risk-informed loss-of-coolant accident rulemaking (Item 1 of Enclosure 1 to SECY-16-0009).

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<sup>1</sup> E-mail dated April 20, 2012 from G. Bowman requesting withdrawal of 10 CFR 50.46a final rule (ADAMS Accession No. ML121500380).

This rule would have provided a voluntary alternative to current regulatory requirements. However, at a public meeting to discuss the Risk Management Regulatory Framework paper (ADAMS Accession No. ML15026A328), certain industry representatives indicated that the nuclear industry would not be interested in implementing the final rule. The NRC staff's regulatory analysis for the draft final rule (ADAMS Accession No. ML103230250) also discussed comments submitted by the Boiling Water Reactor Owners Group, which conveyed the view that it would be difficult to evaluate the cost-benefit of the rule due to uncertainties about the cost of adopting the rule.

The Commission approved the discontinuation of the rulemaking in the staff requirements memorandum (SRM) to SECY-16-0009. On October 6, 2016, the NRC published a notice in the *Federal Register* informing the public of its decision to discontinue the 10 CFR 50.46a ECCS rulemaking. The NRC stated that it had "decided not to proceed with this rulemaking activity because there is minimal adverse impact on our mission, principles, or values and the industry has indicated that there may not be much interest in implementing the final rule" (81 FR 69447).

#### B. Denial of PRM-50-75

Under 10 CFR 2.803(i)(2), after closing the docket for a PRM under § 2.803(h)(2)(ii) by addressing it in an ongoing rulemaking, if the NRC decides not to complete the rulemaking, the PRM is documented as denied. In SRM-SECY-16-0009, the Commission approved discontinuation of the risk-informed LOCA requirements rulemaking, which was the rulemaking identified to address PRM-50-75. Therefore, the NRC is denying PRM-50-75 without prejudice.

### **III. Conclusion**

The NRC previously discontinued the risk-informed LOCA requirements rulemaking and is therefore denying without prejudice PRM-50-75 for the reasons discussed in this document.

Dated: December 8, 2020.

For the Nuclear Regulatory Commission.

Annette L. Vietti-Cook,  
Secretary of the Commission.

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