

October 12, 2018 SECY-18-0102

FOR: The Commissioners

FROM: Margaret M. Doane

Executive Director for Operations

SUBJECT: DENIAL OF PETITION FOR RULEMAKING TO REQUIRE LICENSEES TO

CONFIRM SEISMIC HAZARDS AND FLOODING HAZARDS EVERY

10 YEARS AND ADDRESS ANY NEW AND SIGNIFICANT INFORMATION

(PRM-50-99; NRC-2011-0189)

PURPOSE:

To obtain Commission approval to deny Petition for Rulemaking (PRM)-50-99, submitted by the Natural Resources Defense Council, Inc. (NRDC or the petitioner).

BACKGROUND:

The NRDC filed a petition with the U.S. Nuclear Regulatory Commission (NRC) on July 26, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11216A239), requesting that the NRC institute a rulemaking proceeding applicable to nuclear facilities licensed under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities"; 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants"; and 10 CFR Part 100, "Reactor Site Criteria." The petitioner requested that the NRC institute a rulemaking proceeding to amend applicable regulations to require licensees to confirm seismic and flooding hazards every 10 years and address any new and significant information. This decennial rulemaking would include, if necessary, updating the design basis for structures, systems, and components (SSCs) important to safety to protect against the updated hazards.

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On September 20, 2011 (76 FR 58165), the NRC published in the *Federal Register* a notice of docketing of several PRMs from the NRDC, which included Docket No. PRM-50-99 (Seismic Hazards and Flooding Hazards).¹ The NRC did not request public comment on the petition.

In this paper and associated *Federal Register* notice (FRN) (Enclosure 1), the NRC staff only addresses PRM 50-99.

DISCUSSION:

The petitioner cites SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan," dated July 12, 2011 (ADAMS Package Accession No. ML11186A950), as the rationale for the requested rulemaking. The petitioner references Section 4.1.1, "Protection from Design-Basis Natural Phenomena," of the NRC Near-Term Task Force (NTTF) report on the reevaluation and upgrade of design-basis seismic and flooding protection of SSCs for each operating reactor. In Recommendation 2.2 of Section 4.1.1 of the NTTF report, the Task Force recommends that the Commission direct the following action: "Initiate rulemaking to require licensees to confirm seismic hazards and flooding hazards every 10 years and address any new and significant information. If necessary, update the design basis for SSCs important to safety to protect against the updated hazards." The petitioner's request for rulemaking is consistent with Recommendation 2.2 in the NTTF report.

The staff's subsequent assessment of Recommendation 2.2 concluded that the NRC can meet the intent of this recommendation using an approach other than rulemaking. In Enclosure 2, "Proposed Resolution Plan for Tier 3 Recommendation 2.2 Periodic Reconfirmation of External Hazards," (ADAMS Accession No. ML15254A010) of SECY-15-0137, "Proposed Plans for Resolving Open Fukushima Tier 2 and 3 Recommendations," dated October 29, 2015 (ADAMS Accession No. ML15254A008), the staff proposed to develop a method to leverage and enhance existing NRC processes and programs to ensure that information related to external hazards is proactively and routinely evaluated in a systematic manner. In response to Staff Requirements Memorandum (SRM)-SECY-15-0137, dated February 8, 2016 (ADAMS Accession No. ML16039A175), the staff developed a framework that expands on the concepts described in SECY-15-0137. The staff discusses the framework in Enclosure 2, "Recommendation 2.2: Plan to Ensure Ongoing Assessment of Natural Hazard Information," (ADAMS Accession No. ML16286A569) of SECY-16-0144, "Proposed Resolution of Remaining Tier 2 and 3 Recommendations Resulting from the Fukushima Dai-ichi Accident," dated December 29, 2016 (ADAMS Accession No. ML16286A552).

The framework described in Enclosure 2 to SECY-16-0144 provides a graded approach to allow the NRC to proactively, routinely, and systematically seek, evaluate, and respond to new information on natural hazards. As noted in Enclosure 2, while NTTF Recommendation 2.2 focused on seismic and flooding hazards, the framework is intended to accommodate for a range of natural hazards (e.g., seismic; flooding; and extreme weather, such as high winds). The framework has three main components related to: (1) knowledge base activities, (2) technical engagement and coordination activities, and (3) assessment activities. The framework integrates with existing regulatory activities (e.g., collects information from research and oversight activities as well as from operating experience), uses the NRC's risk-informed regulatory framework, requires coordination between relevant regulatory offices and facilitates

¹ The notice also provided Docket Nos. PRM 50-97 (Emergency Preparedness Enhancements for Prolonged Station Blackouts), PRM 50-98 (Emergency Preparedness Enhancements for Multiunit Events), PRM 50-100 (Spent Nuclear Fuel Pool Safety), PRM 50-101 (Station Blackout Mitigation), and PRM 50-102 (Training on Severe Accident Mitigation [sic] Guidelines). The staff reviewed the other PRMs separately as part of the Mitigation of Beyond-Design-Basis Events draft final rule (see SECY-16-0142, dated December 15, 2016 (ADAMS Accession No. ML16291A186)). This draft final rule is currently with the Commission for review.

the transfer of issues to the appropriate regulatory program. In addition, the framework better integrates NRC processes with the broader natural hazards technical community.

In SRM-SECY-16-0144, dated May 3, 2017 (ADAMS Accession No. ML17123A453), the Commission approved the staff's recommendations for the development of the process enhancements described in Enclosure 2 to the SECY paper. As a result, the Commission has approved an approach other than rulemaking for addressing the petitioner's concerns.

The staff's implementation of the process enhancements described in SECY-16-0144 Enclosure 2 are ongoing. With respect to knowledge base activities, the External Hazards Center of Expertise in the Office of New Reactors is collaborating with the Office of Nuclear Regulatory Research to leverage an existing platform developed by Idaho National Laboratory to support compiling and maintaining existing natural hazards information. For technical engagement and coordination activities, the staff is continuing to develop its plan to engage with leading scientific organizations to maintain awareness of the latest developments in data, models, and methods related to natural external hazards that may affect licensed sites.

The staff is implementing the process enhancements described in Enclosure 2 of SECY-16-0144 via a process that the staff subsequently identified as the "Process for Ongoing Assessment of Natural Hazard Information" (POANHI). At the March 14, 2018 Regulatory Information Conference (RIC), the staff described its plans to implement the POANHI. During the RIC, the staff noted that a cross-agency team has been formed to implement the POANHI. The staff also communicated that the team is working to draft an office instruction (OI) and has begun testing and populating the Natural Hazards Information Digest. The staff also communicated that the Commission-identified completion and implementation date for the POANHI is October 2019.² With respect to the assessment activities, the staff will document in an OI its four stage approach for assessing changes in data, models, and methods related to natural external hazards. The four stage approach will involve the (1) information collection, (2) information aggregation, (3) significance assessment, and (4) referral to appropriate program. The staff plans to solicit external stakeholder input as the OI is developed.

Petition Review Board Meeting Waiver

As described in Appendix A, "Roles and Responsibilities," to Interim Nuclear Material Safety and Safeguards (NMSS) Policy and Procedures 6-10, the Petition Review Board (PRB) reviews a working group's evaluation of the petition and determines whether it is sufficient and adequate; approves the working group's recommended closure of a PRM under 10 CFR 2.803, "Petition for Rulemaking—NRC Action"; specifies a different closure method or requests additional information or briefings, if needed; and votes on the working group's recommendation. In the case of PRM-50-99, in accordance with Appendix A to NMSS Policy and Procedures 6-10, the Director of the NMSS Division of Rulemaking waived the PRB meeting after consulting the PRB members. The PRB members determined that a meeting was unnecessary in this case because the Commission had already addressed the specific issues raised by the petitioner in SRM-SECY-15-0137 and SRM-SECY-16-0144.

² As part of the approval, the Commission stated that the staff should inform the Commission every 6 months regarding the development and implementation of the enhanced process for ongoing assessment of natural hazard information until such time that the enhanced process is fully implemented. The updates are available in ADAMS (ADAMS Accession Numbers ML18116A572 and ML17285B114 (non-public)).

RECOMMENDATION:

The staff recommends that the Commission deny PRM-50-99 because the staff is addressing the issues raised in the petition through enhancements of existing NRC processes and the development of associated staff procedures to ensure that the staff proactively and routinely aggregates and assesses new information related to natural hazards (including, but not limited to, seismic and flooding hazards). The enclosed FRN (Enclosure 1) provides a detailed response to the requests made in the petition.

The staff requests the Commission's approval to publish the FRN (Enclosure 1) denying PRM-50-99. The enclosed letter for signature by the Secretary of the Commission (Enclosure 2) informs the petitioner of the Commission's decision to deny the petition. The staff will also inform the appropriate congressional committees of the Commission's decision.

RESOURCES:

This paper does not address any new commitments or resource implications.

COORDINATION:

The Office of the General Counsel has reviewed this package and has no legal objection to the denial of the petition.

Margaret M. Doane Executive Director for Operations

Enclosures:

- 1. Federal Register Notice
- 2. Letter to the Petitioner

Commissioners' completed vote sheets/comments should be provided directly to the Office of the Secretary by COB Monday, October 29, 2018.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Monday, October 22, 2018, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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