

NUCLEAR REGULATORY COMMISSION

10 CFR Part 70

[Docket No. PRM-70-8]

[NRC-2009-0184]

Nuclear Energy Institute; Consideration of Petition in the Rulemaking Process

AGENCY: Nuclear Regulatory Commission.

ACTION: Petition for rulemaking: Resolution and closure of petition docket.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) will consider five of the issues raised in a petition submitted by the Nuclear Energy Institute (NEI), and is denying the remaining four issues of the petition. The petition requests the NRC amend its regulations to clarify existing event reporting requirements based on experience gained since the requirements were revised.

DATES: The docket for the petition for rulemaking PRM-70-8 is closed on [insert date of publication in the *Federal Register*].

ADDRESSES: Further NRC action on the issues raised by this petition will be accessible at the Federal rulemaking portal, <http://www.Regulations.gov>, by searching on rulemaking docket ID

NRC-2010-0271. The NRC also tracks all rulemaking actions in the “NRC Regulatory Agenda: Semiannual Report NUREG-0936.”

You can access publically available documents related to this petition for rulemaking using the following methods:

Federal Rulemaking Web Site: Go to <http://www.Regulations.gov> and search for documents filed under the following rulemaking docket ID: NRC-2009-0184.

NRC’s Public Document Room (PDR): The public may examine and have copied for a fee publicly available documents at the NRC’s Public Document Room, Room O-1F21, 11555 Rockville Pike, Rockville, MD.

NRC’s Agencywide Document Access and Management System (ADAMS): Publicly available documents created or received at the NRC are available electronically at the NRC’s Electronic Reading Room at <http://www.nrc.gov/NRC/reading-rm/adams.html>. From this page, the public can gain entry into ADAMS, which provides text and image files of NRC’s public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737, or by email to pdr.resource@nrc.gov.

FOR FURTHER INFORMATION CONTACT: Thomas Young, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-5795, e-mail: thomas.young@nrc.gov.

SUPPLEMENTARY INFORMATION:

The Petition

The NRC received and docketed a petition for rulemaking (ADAMS Accession No. ML091110449) dated April 16, 2009, filed by the NEI (petitioner). On June 4, 2009 (74 FR 26814), the NRC published a notice of receipt requesting comment on the petition. The petitioner requested that the NRC amend its regulations to clarify safety event reporting requirements listed in Appendix A to 10 CFR Part 70. The petitioner stated that in a June 2007 white paper, NEI documented challenges posed by implementation of the 2000 version of 10 CFR Part 70, Appendix A. The petitioner stated that the NRC had also observed inconsistent reporting of events under Appendix A and had developed a matrix of reporting issues based on actual events. A working group, consisting of NRC and industry representatives, was formed to achieve a common understanding of reports required under Appendix A. The petitioner stated that industry endorses and is ready to support the suggested modifications to Appendix A that were indicated in the petition.

The NRC identified nine issues in the petition, as follows:

(1) In the introductory text of Appendix A to 10 CFR Part 70, remove “except for (a)(1), (a)(2), and (b)(4), after they have submitted an ISA [Integrated Safety Analysis] Summary in accordance with §70.62(c)(3)(ii). Licensees must comply with (a)(1), (a)(2), and (b)(4) after October 18, 2000.”

(2) In paragraph (a) of Appendix A to 10 CFR Part 70, change the time requirement to submit a written report on events reported to the NRC Operations Center within 1 hour of discovery from 30 days to 60 days.

(3) Revise paragraph (a)(2) of Appendix A to 10 CFR Part 70 to clarify that the intake is associated with a person located outside the controlled area, in order to make the reporting

requirements commensurate with the performance requirements described in 10 CFR 70.61(b)(3).

(4) Revise paragraph (a)(3) of Appendix A to 10 CFR Part 70 to read:

An acute chemical exposure to an individual inside the controlled area from licensed material or hazardous chemicals produced from licensed material that could endanger the life of a worker; or, a chemical release involving licensed material or hazardous chemicals produced from licensed materials that results in a concentration outside of the controlled area that exceeds the quantitative standards established as required by 10 CFR 70.61(b)(4)(ii).

(5) Remove paragraph (a)(5) of Appendix A to 10 CFR Part 70 which states: “Loss of controls such that only one item relied on for safety, as documented in the Integrated Safety Analysis summary, remains available and reliable to prevent a nuclear criticality accident, and has been in this state for greater than eight hours.”

(6) In paragraph (b) of Appendix A to 10 CFR Part 70, change the time requirement to submit written reports on events reported to the NRC Operations Center within 24 hours of discovery, supplemented with the information in 10 CFR 70.50(c)(1) as it becomes available, from 30 days to 60 days.

(7) Revise paragraph (b)(3) of Appendix A to 10 CFR Part 70 to read, “An acute chemical exposure to an individual inside the controlled area from licensed material or hazardous chemicals produced from licensed materials that requires medical treatment at an off-site medical facility.”

(8) In paragraph (b)(4) of Appendix A to 10 CFR Part 70, remove “or may have affected” to clarify the NRC’s expectation on reporting any natural phenomenon or other external event, including fires internal and external to the facility.

(9) Remove paragraph (b)(5) of Appendix A to 10 CFR Part 70 which states:

An occurrence of an event or process deviation that was considered in the Integrated Safety Analysis and (i) was dismissed due to its likelihood; or (ii) was categorized as unlikely and whose associated unmitigated consequences would have exceeded those in § 70.61(b) had the item(s) relied on for safety not performed their safety function(s).

Public Comments on the Petition

The notice of receipt of the petition for rulemaking invited interested persons to submit comments. The comment period closed on August 18, 2009, and the NRC received four comment letters from individuals associated with the industry. The letters approve of the petitioner's request and state that adoption of the proposed amendments would allow a greater level of clarity and consistency without compromising the ability to assess (and respond, if necessary) to a radiological emergency.

Reasons for Consideration

The petition raised nine issues. Two issues requested an additional 30 days to submit a written report of a reportable safety event, and the remaining seven issues addressed specific types of reportable safety events. The NRC will consider five of the issues in the rulemaking process and is denying consideration of the remaining four issues in rulemaking.

The first issue requested removal of text in the introductory paragraph of Appendix A to 10 CFR Part 70. This issue will be considered in the rulemaking process, because the exemption expired on October 18, 2004, and the text is no longer necessary.

The second and sixth issues requested an additional 30 days to submit written reports for reportable events. The requirement to notify the NRC Operations Center within 1 hour or 24 hours of discovery of an event would remain the same; however, the petitioner requested to

extend the time limit to submit a written report from 30 days to 60 days. Both of these issues will be considered in the rulemaking process because allowing additional time would not impact the regulatory performance requirements, and would provide an opportunity for a licensee to complete a more thorough investigation without compromising the timely implementation of corrective actions. Although there have been no late reports, allowing an additional 30 days may reduce the number of amended reports.

The fifth issue requested removal of paragraph (a)(5) of Appendix A to 10 CFR Part 70 because reporting this type of event within 1 hour (e.g. the loss of controls) is also required to be reported within 24 hours by paragraph (b)(2) of Appendix A to 10 CFR Part 70. In addition, a 1-hour reporting requirement for nuclear criticality safety is not consistent with the allowed risk for other high consequence events for which a single item relied on for safety is allowed. This issue will be considered in the rulemaking process because the licensee would still be required to report these events within 24 hours of discovery in accordance with paragraph (b)(2) of Appendix A to 10 CFR Part 70. In addition, each facility is required to submit a safety plan (ISA, or Integrated Safety Analysis), and all components (known as controls) of this plan are thoroughly evaluated to ensure safety of the workers, the public, and the environment.

The ninth issue requested removal of paragraph (b)(5) of Appendix A to 10 CFR Part 70 because it is redundant with paragraph (b)(1) of Appendix A to 10 CFR Part 70. This issue will be considered in the rulemaking process because removing the paragraph would not negatively impact the regulatory performance requirements.

Reasons for Denial

The NRC is denying four of the nine issues raised in the petition because each issue raised is inconsistent with the purpose of the reporting requirement to keep NRC informed about conditions that could result in an imminent danger to a worker, a member of the public, or the

environment. As previously stated in the *Federal Register* Notice for the proposed rule (64 FR 41349, July 30, 1999) the regulation requires a licensee to inform NRC about licensee efforts to address potential emergencies. Once safe conditions have been restored after an event NRC will disseminate information on the event to the nuclear industry to reduce the likelihood of recurrence of the event in the future. Also, in the event of an emergency, NRC will accurately respond to requests for information from the public and the media. Finally, NRC must have information that enables it to evaluate licensee and industry performance to fulfill its statutory mandate to protect the health and safety of the worker and the public, and to protect the environment. The reporting requirement is based on consideration of the risk and consequences established in 10 CFR 70.61(b) and is intended to replace and expand the way in which licensees were reporting events prior to the effective date of the rule on October 18, 2000. The regulation requires a licensee to report events based on two criteria: (1) whether actual consequences have occurred or a potential for such consequences exists, and (2) the seriousness of the actual or potential consequences.

The third issue raised by the petitioner requested that the NRC revise paragraph (a)(2) of Appendix A to 10 CFR Part 70 to clarify that the acute intake of 30 milligrams or greater of uranium in soluble form is by an individual located outside the controlled area to conform this reporting requirement to the performance requirement in 10 CFR 70.61(b)(3). This request is denied because such a change would only include an individual outside the controlled area and would not include a worker or an individual located inside the controlled area. The NRC intends the reporting requirement in paragraph (a)(2) to be broader than the performance requirement in 10 CFR 70.61(b). The reporting requirement applies to workers and all individuals regardless of location whether outside or inside the controlled area. The NRC continues to expect a licensee to notify the NRC within 1 hour of discovery whenever the uranium intake limit is exceeded by any individual regardless of location.

The fourth issue raised by the petitioner requested revision of paragraph (a)(3) of Appendix A to 10 CFR Part 70 to eliminate potential confusion about quantitative values for acute chemical exposure of individuals located inside the controlled area. In addition, the petitioner stated that the proposed revision would require a licensee to report a chemical release concentration exceeding a quantitative standard for an individual outside the controlled area, rather than requiring a licensee to determine whether an acute chemical exposure to an individual outside the controlled area actually occurred before reporting the event.

This request is denied because the proposed change would include reporting an acute chemical exposure only for an individual located inside the controlled area. The petitioner's proposed change is inconsistent with the intent of the reporting requirement in paragraph (a)(3) that applies to workers and all individuals regardless of location whether outside or inside the controlled area. The NRC intends the reporting requirement in paragraph (a)(3) to be broader than the performance requirement in 10 CFR 70.61(b)(4)(ii). The NRC should be informed when such events occur, regardless of the licensee's determination with respect to the performance requirements. This enables the NRC to independently evaluate the licensee's assessment of whether the performance requirement was met, on the basis of supplemental information as it becomes available under 10 CFR 70.50(c)(1), followed by the written report.

The seventh issue raised by the petitioner requested revision of paragraph (b)(3) of Appendix A to 10 CFR Part 70 to limit the 24-hour reporting requirement for an acute chemical exposure to an individual inside the controlled area and only if the individual required treatment at an offsite medical facility. The petitioner proposed that this change would ensure event reporting at a threshold that the NRC would generally want to know about. This issue is denied for the same reasons as stated in the preceding paragraphs and because the current regulation requires a report within 24 hours of discovery of an acute chemical exposure described in 10 CFR 70.61(c)(4) regardless of the location of the exposed individual. Section 70.61(c)(4) specifically refers to both workers and individuals outside the controlled area. However, the

proposed change would include reporting an acute chemical exposure only for an individual located inside the controlled area. Additionally, the location where the injured person is treated (e.g., an offsite medical facility) should not be a factor whether to notify the NRC. It is the intent of the NRC to ensure the safety of individuals inside and outside the controlled area and has focused the reporting requirements on potential impacts on both workers and members of the public. To achieve this goal, a licensee must notify the NRC of an acute chemical exposure that requires medical treatment, regardless of where the treatment is administered.

The eighth issue raised by the petitioner requested the removal of the text “or may have affected” from paragraph (b)(4) of Appendix A to 10 CFR Part 70 because the phrase is subjective when considering the safety function or availability of an item relied on for safety. This issue is denied because the full impact of natural phenomena or other external events such as a tornado, earthquake, flood, or fire external or internal to the facility could prove difficult for a licensee to fully assess and determine the status of all items relied on for safety. Since these events could affect a licensee’s facility, the NRC needs to be informed about such events to assess a licensee’s conclusion of whether any detrimental effects did in fact occur, or could have occurred in the absence of controls that were present but not part of the safety basis. To achieve our safety goal to ensure adequate protection of health and safety of individuals and the environment and to implement the strategy to effectively respond to certain conditions and a licensee’s actions, it would be in the best interest of the licensee and the surrounding community to report to the NRC the occurrence of any natural phenomenon or external event that is severe enough to potentially impact the intended safety function or availability or reliability of one or more items relied on for safety.

For the reasons cited in this document, the NRC will consider five of the nine issues raised in this petition in the rulemaking process, and is denying the remaining four issues. The NRC will consider the five issues in the rulemaking process; however, the petitioner’s concerns may not be addressed exactly as the petitioner has requested. During the rulemaking process

the NRC will solicit comments from the public and will consider all comments before finalizing the rule. Future actions for PRM-70-8 will be reported in NUREG-0936, "NRC Regulatory Agenda" which is publicly available on the NRC Web site at <http://www.nrc.gov/about-nrc/regulatory/rulemaking.html>. The regulatory agenda is a semiannual compilation of all rules on which the NRC has recently completed action, or has proposed action, or is considering action, and of all petitions for rulemaking that the NRC is working to resolve. Further information on the five issues raised in this petition may be tracked through <http://www.Regulations.gov> under rulemaking docket ID NRC-2010-0271. Existing NRC regulations provide the basis for reasonable assurance that the common defense and security and public health and safety are adequately protected. For the reasons cited in this document, the NRC closes the docket on PRM-70-8.

Dated at Rockville, Maryland, this 30th day of September, 2010.

For the Nuclear Regulatory Commission.

/RA/

R. W. Borchardt,
Executive Director for Operations