June 25, 2010

MEMORANDUM TO: Shana R. Helton, Chief
Rulemaking and International Programs Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Richard F. Dudley, Senior Project Manager **/RA/ Richard Dudley**
Rulemaking and International Programs Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE JUNE 4, 2010 PUBLIC MEETING TO DISCUSS THE §50.46a DRAFT FINAL RULE ON RISK-INFORMED CHANGES TO LOSS-OF-COOLANT ACCIDENT TECHNICAL REQUIREMENTS

The U.S. Nuclear Regulatory Commission (NRC) held a Category 3 public meeting on June 4, 2010 to discuss the draft final rule to modify the Emergency Core Cooling System (ECCS) technical requirements for loss-of-coolant accidents (LOCAs). The meeting was held in Rockville, MD at NRC headquarters. The meeting was attended by 24 individuals, including those who participated via audio teleconferencing. Participants included representatives from the nuclear industry, the NRC staff, and other public stakeholders.

The NRC staff presentation addressed the various categories of public comments received on the supplemental proposed rule and how the NRC resolved the issues raised, including any necessary changes to the draft final rule language. Slides from the NRC presentation are available in the NRC's Agencywide Document Access and Management System (ADAMS) under ML101590127.

The most significant areas of discussion are summarized as follows:

1. Enhanced Leak Detection

The NRC described the staff's intent that all reactor coolant system piping larger than the transition break size (TBS) should be monitored by enhanced leak detection equipment consistent with the guidance provided in Regulatory Guide 1.45, Rev. 1. Industry representatives stated their view that many plants now have leak detection systems installed that would meet the requirements in the draft final rule. The NRC acknowledged that further clarification of leak detection requirements should be provided in the final rule.

2. Potential Use of § 50.46a to Resolve GSI-191

Industry representatives asked how the draft final § 50.46a rule could potentially be applied to assist in resolving GSI-191 on LOCA-Generated Debris Accumulation. The staff responded that the draft final § 50.46a could be applied to GSI-191 but licensees would have to adopt and comply with all aspects of the rule for those parts of the rule they chose to utilize, including the generic study applicability reviews and probabilistic risk assessment requirements. Licensees could use a reduced level of rigor to propose and justify an alternative zone of influence (ZOI) for pipe breaks larger than the TBS. Reducing the ZOI could substantially reduce the amount of debris generated by the larger pipe breaks.

A question arose about whether a licensee could adopt § 50.46a for the purposes of re-evaluating ECCS long term cooling but not apply it to the existing LOCA break spectrum analyses. Industry representatives also noted that the description of an acceptable evaluation model in the draft final § 50.46a for breaks larger than the TBS is almost identical to the model description for the smaller, design-basis breaks. They requested clarification as to whether the NRC will require effectively identical evaluation models for both above and below the TBS. The NRC agreed that the difference in requirements for acceptable evaluation models for breaks greater than versus less than the TBS needed further consideration.

Industry representatives also asked what long-term requirements would be imposed on licensees who adopted § 50.46a to resolve GSI-191 and then made no additional plant changes. The staff noted that such licensees would have to maintain and upgrade their PRA models every 4 years and would have to review all future facility changes to ensure that they did not invalidate the previous reviews that demonstrated the applicability of the two generic studies.

Industry representatives then requested information about the schedule for preparing the implementation guidance for the § 50.46a rule. The staff noted that the regulatory guide for determining applicability of the generic studies would be published in a few weeks. The staff agreed to develop updated schedules for the remaining implementation guidance.

3. Public Comments Related to Petitions for Rulemaking

The NRC noted that several public comments objected to proceeding with the § 50.46a rule because of possible inadequacies in the NRC's ECCS evaluation model requirements and acceptance criteria as asserted in two recent petitions for rulemaking. The NRC noted that the § 50.46a rule presumes that evaluation model requirements are adequate. Should the NRC determine that evaluation models are inadequate, changes would be required to all evaluation models used for all design basis accident evaluations, not simply those relying on § 50.46a. In response to questions raised by public stakeholders, the NRC explained its decision not to discontinue the § 50.46a rulemaking by noting that several of the specific inadequacies raised by the commenters are already being addressed in another ongoing rulemaking. The other alleged inadequacies are being addressed by review of petition for rulemaking - PRM-50-93. If any inadequacies are confirmed by NRC's review of this petition, the NRC will undertake an additional rulemaking to make all necessary changes to its nuclear reactor regulations in 10 CFR Part 50.

4. Comments Related to NRC's Exclusion from the Backfit Rule of Plant Changes Made Necessary in the Future by Changes to the TBS

Industry representatives asked why the draft final rule did not allow the Backfit Rule (§ 50.109) to apply to plant changes that could be made necessary in the future by changes made to the TBS. The NRC staff explained that certain exclusions from § 50.109 were the result of a policy decision made by the Commission and provided to the staff in a staff requirements memorandum on July 1, 2004. (See ADAMS ML041830412.)

Enclosure:
List of attendees

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Enclosure:
1. Attendee List

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ADAMS Accession No. ML101760071 (Package)
ADAMS Accession No. ML101750151 (Meeting Summary)
ADAMS Accession No. ML101590127 (Staff Presentation Slides)
ADAMS Accession No. ML101400381 (Meeting Notice)

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