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NUCLEAR REGULATORY COMMISSION ADVISORY COMMITTEE ON REACTOR SAFEGUARDS WASHINGTON, D.C. 20555-0001

February 8, 2000

The Honorable Richard A. Meserve Chairman U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

Dear Chairman Meserve:

SUBJECT:

SECY-00-0011, "EVALUATION OF THE REQUIREMENT FOR LICENSEES TO UPDATE THEIR INSERVICE INSPECTION AND INSERVICE TESTING

PROGRAMS EVERY 120 MONTHS"

During the 469th meeting of the Advisory Committee on Reactor Safeguards, February 3-5, 2000, we discussed the NRC staff's analysis of ACRS comments and recommendations regarding the 120-month update requirement for inservice inspection (ISI) and inservice testing (IST) programs, which is included in SECY-00-0011 and also in a January 13, 2000, memorandum from the NRC Executive Director for Operations. The staff continues to recommend that the update requirement be eliminated from 10 CFR 50.55a, "Codes and standards." If the update requirement is eliminated, any subsequent NRC-imposed update of Section XI of the American Society of Mechanical Engineers (ASME) Code would be subject to a backfit analysis in accordance with 10 CFR 50.109, "Backfitting."

We continue to recommend that the Commission adopt Option 2 proposed by the staff in SECY-00-0011 and retain the 120-month update requirement for ISI and IST programs in 10 CFR 50.55a.

The assurance of the integrity of the reactor coolant pressure boundary and the containment is one of the cornerstones of the NRC regulatory system. The license renewal process is predicated on the demonstration that any effects of aging on critical plant systems will be adequately managed. Effective ISI and IST programs are crucial to this demonstration and to public confidence in the license renewal process. Because of this, we believe that the ISI and IST standards are different from other industry standards for which there is no mandatory update requirement.

In support of Option 1 in SECY-00-0011, the Nuclear Energy Institute (NEI) and the staff argue that the current ASME Code requirements have reached such a level of maturity that further updating will provide little benefit. We believe that the review of the past decade of experience presented to us by the ASME demonstrated that there were significant changes to the ISI, IST, and operations and maintenance requirements that improved the effectiveness and efficiency of these programs. Indeed, both the staff and NEI recognized that the 1989 version of the Code would have to be updated to include requirements from the 1992, 1995, and 1996 versions of the Code to be considered as an acceptable baseline. The staff and NEI arguments would be

more convincing if they could identify a decade in which significant changes had not been made in the Code. Changes in the Code reflect the latest knowledge and experience in inspections and testing and sometimes provide relief from existing requirements.

Changes are not introduced into the ASME Code requirements frivolously. Approximately 30% of the Section XI membership are representatives of licensees. They have a very good understanding of the impact of any proposed changes on their operations. Any proposed changes are subject to peer review by a broad-based group of experts from the licensees, manufacturers, vendors, the NRC, and other engineering and consulting organizations. If the update requirement is eliminated, the staff may be required to demonstrate to the public, including State officials, why requirements in consensus standards should not be adopted.

Under Option 1, any mandated updates to the ISI and IST programs would have to pass the 10 CFR 50.109 backfit criteria. In SECY-00-0011, the staff argues that it can make qualitative assessments to demonstrate a substantial increase in the overall protection of the public health and safety. We continue to believe that 10 CFR 50.109 evaluations are not well suited to assess the appropriateness of defense-in-depth measures, such as the ASME Code updates. Effective ISI and IST programs based on a broad technical consensus standard are prudent to provide confidence that the effects of aging are adequately managed.

Sincerely,

Dana A. Powers Chairman

References:

1. SECY-00-0011, memorandum dated January 14, 2000, from William D. Travers, Executive Director for Operations, NRC, for the Commissioners, Subject: Evaluation of the Requirement for Licensees to Update Their Inservice Inspection and Inservice Testing Programs Every 120 Months.

 Letter dated January 13, 2000, from William D. Travers, Executive Director for Operations, NRC, to Dana A. Powers, Chairman, ACRS, Subject: Draft Commission Paper Regarding 120-Month Update Requirement for Inservice Inspection and Inservice

Testing Programs.

3. ACRS letter dated December 8, 1999, from Dana A. Powers, Chairman, ACRS, to the Honorable Richard A. Meserve, Chairman, NRC, Subject: Draft Commission Paper Regarding the 120-Month Update Requirement for Inservice Inspection and Inservice Testing Programs.

4. ACRS letter dated May 19, 1999, from Dana A. Powers, Chairman, ACRS, to the Honorable Shirley A. Jackson, Chairman, NRC, Subject: The Role of Defense In Depth

in a Risk-Informed Regulatory System.

 Memorandum dated June 24, 1999, from Annette L. Vietti-Cook, Secretary of the Commission, to William D. Travers, Executive Director for Operations, NRC, Subject: Staff Requirements - Reconsideration of SECY-99-017 (Proposed Amendment to 10 CFR 50.55a).

- 6. Letter dated April 19, 1999, from Dana A. Powers, Chairman, ACRS, to William D. Travers, Executive Director for Operations, NRC, Subject: SECY-99-017, "Proposed Amendment to 10 CFR 50.55a."
- 7. Table provided by ASME during ACRS meeting, December 2-4, 1999, "Important Section XI SG NDE Code Changes and Code Cases, 1989 Addenda through 1999 Addenda," Revision 2, November 1, 1999.
- 8. Memorandum dated November 12, 1999, from Ashok C. Thadani, Office of Nuclear Regulatory Research, NRC, to John T. Larkins, ACRS, Subject: Generic Safety Issue 190, "Fatigue Evaluation of Metal Components for 60-Year Plant Life."