



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D C 20555

December 12, 1997

The Honorable Shirley Ann Jackson  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Dear Chairman Jackson:

SUBJECT: PROPOSED REVISIONS TO 10 CFR 50.59 (CHANGES, TESTS AND EXPERIMENTS)

During the 447th meeting of the Advisory Committee on Reactor Safeguards, December 3-6, 1997, we met with representatives of the NRC staff and the Nuclear Energy Institute (NEI) to discuss proposed revisions to 10 CFR 50.59 (Changes, Tests and Experiments). We also discussed the proposed alternate rulemaking language proposed by NEI and guidance contained in NEI 96-07, Revision 0A, "Guidelines for 10 CFR 50.59 Safety Evaluations." We had the benefit of the documents referenced.

As a first step, the staff proposes a set of revisions to 10 CFR 50.59 that would clarify the current rule with respect to: (1) the criteria to be used to determine what constitutes an "unreviewed safety question" and (2) the language that requires "zero increase" in probability and consequences. The staff's stated intent is to continue developing a second-phase rule that would make the 10 CFR 50.59 process more risk-informed.

We support this two-step process because we agree with the staff and industry that there is an urgent need for stabilization of the 10 CFR 50.59 process. The proposed phase one revisions to the rule can provide interim stabilization. However, we believe the constraint of "zero increase" in the proposed revisions will serve to exacerbate the problem of excessive staff resources being required to review a large number of changes that are risk insignificant.

Therefore, in the second phase, we urge that the development of a new risk-informed rule be continued on an expeditious schedule. This rule should eliminate the "zero-increase" criteria and, instead, take as a starting point the

position that qualifying changes have effects on risk that are considered too small to require quantification of either the magnitude or the direction of change. Because probabilistic risk assessments (PRAs) will be insensitive to the types of changes made under 10 CFR 50.59, it will be challenging for the staff to develop a set of performance criteria for guidance to licensees for determining what changes qualify for consideration within the revised 10 CFR 50.59 process. It is essential that such performance criteria, rooted in the concepts of very small risk effects and compatibility with the proposed Regulatory Guide 1.174 (formerly DG-1061) process, be developed as guidance for implementing the risk-informed rule.

Sincerely,



R. L. Seale  
Chairman

References:

- 1 Memorandum dated November 24, 1997, from Jack W. Roe, Office of Nuclear Reactor Regulation, NRC, to John T. Larkins, ACRS, transmitting summary information on 10 CFR 50.59 Rulemaking for December 4, 1997, meeting with ACRS.
- 2 U. S. Nuclear Regulatory Commission, Proposed Rule, 10 CFR Part 50 (and Part 60, 72, and 76), Changes, Tests and Experiments, dated November 6, 1997.
- 3 Nuclear Energy Institute, NEI 96-07, Draft Revision 0A, "Guidelines for 10 CFR 50.59 Safety Evaluations," July 1997.
- 4 Report dated October 9, 1997, from R. L. Seale, Chairman, ACRS, to Shirley Ann Jackson, Chairman, NRC, Subject: "Proposed Changes to 10 CFR 50.59 and Proposed Revision 1 to Generic Letter 91-18."
5. Report dated April 8, 1997, from R. L. Seale, Chairman, ACRS, to Shirley Ann Jackson, Chairman, NRC, Subject: "Proposed Regulatory Guidance Related to Implementation of 10 CFR 50.59 (Changes, Tests and Experiments)."