

D870610

The Honorable Lando W. Zech, Jr.
Chairman
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Chairman Zech:

SUBJECT: ACRS COMMENTS ON QUALITY ASSURANCE PROGRAMS FOR A HIGH-LEVEL WASTE REPOSITORY

During the 326th meeting of the ACRS, June 4-6, 1987, we heard a report from the Division of High-Level Waste Management on its review of the quality assurance (QA) program being utilized by the U.S. Department of Energy (DOE) in the development of a high-level waste (HLW) geologic repository. This subject was also discussed during a meeting of our Waste Management Subcommittee on May 18-19, 1987.

We are pleased that the NRC Staff is generally familiar with the QA lessons learned from experience in the nuclear power plant arena as described in the report of the so-called Ford Amendment Study, NUREG-1055 (Reference 1). However, we are concerned that some prior mistakes might be repeated in the HLW repository development process.

In particular, we believe that confirmation of quality should be carried out in discrete steps throughout the lengthy HLW repository development process (e.g., through readiness reviews), in contrast to confirmation near the end of the process only. Although they are not required to do so by regulations, we urge that the DOE and the NRC jointly define acceptance criteria and a schedule for conducting such readiness reviews. Specific hold points should be jointly agreed to in the HLW repository development process. Reviews should be conducted at these hold points, using the acceptance criteria agreed to in advance, to verify quality in the development process up to that point. Confirmation of quality sufficient for licensing would indicate that the development process is ready to proceed toward the next quality review hold point. Failure to confirm the quality of the development process as it proceeds could result in considerable difficulty in licensing the completed repository.

Although the NRC Staff has in the past expressed serious concerns about certain aspects of the DOE quality assurance program, we were pleased to hear a more favorable current report. The NRC Staff should continue monitoring DOE's activities in this area. Of special interest to us is the so-called Q-list (Reference 2) being developed by the NRC Staff for application to DOE's program. We look forward to receiving this document as soon as it is available in final form.

Concurrent with the above, we encourage the NRC Staff to move forward rapidly in the development of an NRC quality assurance program for application to those portions of NRC activities that pertain to its independent evaluation

and review of the DOE high-level waste program. The NRC quality assurance program should apply, in particular, to the NRC contractors (e.g., the Federally Funded Research and Development Center) involved in this work.

We request that the NRC Staff keep us informed on the progress of both the DOE and the NRC quality assurance programs.

Sincerely,

William Kerr
Chairman

References:

1. NUREG-1055, "Improving Quality and the Assurance of Quality in the Design and Construction of Nuclear Power Plants" (A Report to Congress), dated May 1984 (Reprinted March 1987).
2. Draft Generic Technical Position on Items and Activities in the HLW Geologic Repository Program Subject to 10 CFR Part 60 Quality Assurance Requirements, dated July 1986

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