



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

April 29, 1983

Mr. William J. Dircks
Executive Director for Operations
U. S. Nuclear Regulatory Commission
Washington, DC 20555


Dear Mr. Dircks:

SUBJECT: SURVIVABILITY OF SAFETY-RELATED EQUIPMENT

During its 276th meeting, April 14-16, 1983, the ACRS discussed with the NRC Staff and the Seabrook OL Applicant the question of the survivability of equipment important to safety in the event of the burning of large quantities of hydrogen in a large, dry PWR containment. Current requirements for large, dry PWR containments do not include such events involving quantities of hydrogen beyond those calculated to be generated in a "well-behaved" LOCA. However, NRC Staff members present stated their belief that current environmental qualification requirements would, if met, enable the equipment of interest to survive such an event. The Applicant's representatives noted, however, that the matter had not been explicitly examined.

The Committee believes that the Staff should consider the need for equipment to be qualified to survive a large hydrogen burn in large, dry PWR containments. In particular, attention should be directed toward equipment necessary to shut a plant down, to continue to remove decay heat, and to maintain the integrity of containment for long periods. If, on reflection, the NRC Staff is of the opinion that current environmental qualification requirements lead automatically to equipment qualified to withstand such an event, please inform the Committee.

Sincerely,


Jesse C. Ebersole
Acting Chairman