



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

July 14, 1983

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

Dear Mr. Dircks:

SUBJECT: ACRS COMMENTS ON USI A-17, "SYSTEMS INTERACTION"

During a meeting of the ACRS' Reliability and Probabilistic Assessment Subcommittee held on July 6, 1983, the NRC Staff discussed the current status of USI A-17, "Systems Interaction," including a draft action plan dated June 1983.

The systems interaction issue was first identified by the ACRS to the AEC Director of Regulation, L. M. Muntzing, in a letter dated November 8, 1974 so that the issue is not a new one. Many significant interactions have occurred during plant operation and other potential interactions have been uncovered by analysis.

We are perplexed and even disturbed that according to the current draft action plan the NRC Staff still appears to be trying to ascertain whether systems interaction poses a potentially significant safety issue. Further, rather than identifying a reasonably workable method and an appropriate schedule for implementation, the draft action plan appears to be one which will call for further examination of some alternative theoretical approaches in an effort to define detailed prescriptive requirements to be used if the NRC Staff eventually requires systems interaction studies.

The ACRS proposed one possible pragmatic approach to systems interaction studies in its letter on Indian Point 3 dated October 12, 1979. Although this approach relies heavily on judgment and the initiative of the licensee and is somewhat open ended, we are convinced that some such approach is necessary if the process is to be effective.

We recommend that more reliance be placed on the licensees (who, in any event, are ultimately responsible for safety) to implement reasonable systems interaction studies, defined to meet general criteria but not based on detailed, prescriptive requirements from the NRC Staff. It may be that appropriate studies can be carried out in conjunction with the proposed Integrated Safety Assessment Program.

Mr. William J. Dircks

- 2 -

July 14, 1983

We recommend that the continued study of the general problem by the NRC Staff be concluded and that a systematic program of systems interaction studies for individual plants be initiated in the near future.

Sincerely,

A handwritten signature in black ink, appearing to read "J. J. Ray". The signature is stylized with large, overlapping loops and a long horizontal stroke at the end.

J. J. Ray
Chairman