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

April 8, 1975

Honorable William A. Anders
Chairman
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: REACTOR SAFETY STUDY, WASH-1400

Since the release of the draft Reactor Safety Study, WASH-1400 (RSS) in August 1974, the Advisory Committee on Reactor Safeguards has been reviewing the considerable body of information presented in the report, its appendices, and the comments received on it, giving primary attention to the potential implications of the draft report on the reactor licensing process. In its review, the Committee has had the benefit of Subcommittee meetings held on October 9, November 22, and December 20, 1974, and March 5, 1975, and of full Committee meetings held on October 10-12, October 31-November 2, November 14-16, December 5-7, 1974, and January 9-11, February 6-8, March 6-8, April 3-5, 1975.

The ACRS believes that the RSS represents a valuable contribution to the understanding of light water reactor safety in its categorization of hypothetical accidents, identification of potential weak links for the two reactors studied, and its efforts to develop comparative and quantitative risk assessments for accident sequences examined. The Committee believes that a continuing effort and better data will be required to evaluate the validity of the quantitative results in absolute terms. Special emphasis should be given to quantification of the initiators, probabilities, and consequences of core melting.

The Committee believes that the methodology of the RSS should be applied to other types and designs of reactors, other site conditions and other accident initiators and sequences, and that the current efforts to compile, categorize, and evaluate nuclear experience should be extended in breadth and depth to improve the data base for future studies of this type.

The Committee believes, further, that the RSS can serve as a model for similar studies of the failure probabilities, consequences, and resulting risks of other hazards (both nuclear and non-nuclear) to the health and safety of the public.

The Committee believes that many of the techniques used in the RSS can and should be used by reactor designers to improve safety and by the NRC Staff as a supplement to safety assessment.

The Committee's review of the RSS has not caused the Committee to alter its judgement that reactors now under construction or in operation do not represent undue risks to the health and safety of the public.

The Committee will continue to review the RSS and will comment further on it in the future.

Sincerely,

Original Signed by:
W. Kerr

William Kerr