



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

May 9, 1978

Mr. Lee V. Gossick
Executive Director for Operations
U. S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: LIQUID PATHWAY GENERIC STUDY

Dear Mr. Gossick:

During its 216th and 217th meetings, April 6 and 7, and May 4 and 5, 1978, the Advisory Committee on Reactor Safeguards reviewed the Liquid Pathway Generic Study (NUREG-0440), which discusses the impacts of accidental radioactive releases to the hydrosphere from floating and land-based nuclear power plants. NUREG-0440 was also considered during a Subcommittee meeting in Washington, DC on March 22, 1978. This matter and an earlier draft version of this report have been the subject of ongoing review by the Committee since 1975. During its review, the Committee had the benefit of presentations by representatives of the NRC Staff and Offshore Power Systems (OPS).

Although the discussions at these meetings indicated that there are still areas of disagreement between the NRC Staff and OPS on specific details of the various assumptions entering the calculations, it appears that a reasonable perspective has been developed on the range of potential accidents, the identity and sources of the critical radionuclides, and the accompanying dose patterns and consequences. The current study also appears to provide a basis for evaluating possible design modifications. Although the Committee recommends that the NRC Staff and OPS continue to work to resolve disagreements and to eliminate weaknesses in these assessments, the ACRS believes that the perspective provided by the study can serve as a useful basis for current evaluations of the health and safety risks of radionuclide releases to the hydrosphere from land-based and proposed floating nuclear power plants.

Sincerely yours,

Stephen Lawroski
Stephen Lawroski
Chairman