## ADVISORY COMMITTEE ON REACTOR SAFEGUARDS UNITED STATES ATOMIC ENERGY COMMISSION WASHINGTON, D.C. 20545

November 19, 1963

Honorable Glenn T. Seaborg Chairman U. S. Atomic Energy Commission Washington, D. C.

Subject: SPENT FUEL SHIPMENT CASK PROGRAM

Dear Dr. Seaborg:

At the request of the Division of Licensing and Regulation, the Advisory Committee on Reactor Safeguards has followed the problems in development of large spent fuel shipment casks. The Committee has also discussed the status of research concerning shipment casks as part of its review of the Division of Reactor Development Safety Research Program.

Committee comments, concerning the development of these casks are contained in the attached letter to the General Manager.

Sincerely yours,

/s/ D. B. Hall

D. B. Hall Chairman

## Attachment:

Letter to the AEC General Manager, dated November 19, 1963, Subject: Spent Fuel Shipment Cask Program.

## ADVISORY COMMITTEE ON REACTOR SAFEGUARDS UNITED STATES ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

November 19, 1963

A. R. Luedecke
General Manager
U. S. Atomic Energy Commission
Washington, D. C.

Subject: REVIEW OF SPENT FUEL SHIPMENT CASK PROGRAM

Dear General Luedecke:

At the request of the Division of Licensing and Regulation, the Advisory Committee on Reactor Safeguards has been following the problems in development of large spent fuel casks. A briefing by members of the DL&R Staff on the status of this work was given to members of the ACRS Subcommittee on June 5, 1963, and further review of the research status was given at a meeting of the Division of Reactor Development Staff and the ACRS Subcommittee on Reactor Safety Research on October 16, 1963.

Substantially all of the spent fuel shipping casks currently in use, being designed, or fabricated use lead as the principal shielding material. Potential loss of shielding by melting in case of fire or by penetration is a drawback in the use of lead. Consequences of the loss of shielding in a fire might be severe.

A large increase in the number and size of casks built and shipped is expected. In view of the anticipated increase in cask shipments, and the problem of following and protecting them during transit, the Committee recommends that the research program on spent fuel casks include study of shielding materials other than lead.

Sincerely yours,

/s/ D. B. Hall

D. B. Hall Chairman