

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

October 21, 1958

Honorable John A. McCone  
Chairman, U. S. Atomic Energy Commission  
Washington 25, D. C.

Subject: SPERT-III REACTOR

Dear Mr. McCone:

The operation of the SPERT-III reactor was reviewed by the Advisory Committee on Reactor Safeguards on October 15, 1958, at the request of the Division of Licensing and Regulation. The Committee considered both the report of the Division of Licensing and Regulation and the report from the Phillips Petroleum Company, IDO-16425.

SPERT-III is a light water moderated and cooled experimental reactor designed to operate intermittently at pressures up to 2000 psi and temperatures up to 670°F. It is designed for transient studies of pressurized water reactors operating under full power conditions. The SPERT-III program is an extension of the reactor kinetic studies which have been carried out successfully under the SPERT-I program.

The nature of the SPERT-III experimental program is such that this reactor will be operated closer to failure conditions than normal power reactors. The safe performance of these experiments rests largely on the competence of the operating staff. The Advisory Committee on Reactor Safeguards believes that the SPERT staff by performance has shown that it can handle this type of assignment. The Committee commends, and agrees with, the SPERT proposal to avoid running the more hazardous experiments during times of adverse meteorological conditions.

The Advisory Committee on Reactor Safeguards concurs with the Division of Licensing and Regulation that SPERT-III can be operated without undue hazard to the health and safety of the public.

Honorable John A. McCone

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The Advisory Committee on Reactor Safeguards wishes to comment again that the SPERT program is contributing extremely worthwhile information which is basic to many of the safety problems of the entire atomic reactor industry.

Dr. Richard L. Doan excused himself from participation in the discussion and recommendation in this case.

Sincerely yours,

/s/

C. Rogers McCullough  
Chairman

cc: P. F. Foster, GM  
H. L. Price, DL&R

Dr. Wolman)  
Dr. Brooks) not at meeting