

**ADVISORY COMMITTEE ON REACTOR SAFEGUARDS**  
**UNITED STATES ATOMIC ENERGY COMMISSION**  
**WASHINGTON 25, D.C.**

November 4, 1957

Honorable Lewis L. Strauss  
Chairman, U. S. Atomic Energy Commission  
Washington, 25, D. C.

Subject: GENERAL ELECTRIC TEST REACTOR

Dear Mr. Strauss:

This letter constitutes the report of the Advisory Committee on Reactor Safeguards on the application for a construction permit by the General Electric Company, Docket No. 50-70, in accordance with Section 182 of the Atomic Energy Act of 1954, as amended.

The application is for a test reactor designed to operate at power levels up to 30 megawatts of heat. It is to be located at the Vallecitos Atomic Laboratory site situated in Pleasanton Township, California.

The purpose of the reactor is to provide a facility to irradiate at high neutron fluxes fuel elements and other components for proposed nuclear power plants for developmental testing.

The Committee is of the opinion that the proposed reactor and the experimental program as generally described in the application can be operated at the site selected with an acceptably low risk of any injury to the health and safety of the public.

The Committee, in reaching its opinion, has been influenced primarily by the following considerations:

- a. The containment proposed by General Electric appears adequate;
- b. The leakage rate from this container can be periodically checked;
- c. The site appears adequate for this reactor, particularly because of the low population density in the surrounding area. Further, this location has already been found acceptable for the operation of reactors of comparable power;

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- d. The technology of the type of reactor proposed is fairly well understood.

The Committee, of course, cannot pass judgment at this time on the conduct of particular experiments in this facility since the experimental program is only described in general terms. However, the Committee does believe that the kind of experimental program outlined can be conducted safely in the proposed facility with appropriate restrictions.

Sincerely yours,

/s/

C. Rogers McCullough  
Chairman  
Advisory Committee on  
Reactor Safeguards

Orig. & 2 copies sent to Chairman

cc: ACRS Members  
R. H. Grahams  
11/15/57