

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

April 10, 1961

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

Subject: REPORT ON SANDIA PULSED REACTOR FACILITY

Dear Dr. Seaborg:

At its thirty-third meeting, April 6-8, 1961, the Advisory Committee on Reactor Safeguards met with the AEC staff and the applicant to consider the proposal by Sandia Corporation to operate the Sandia Pulsed Reactor Facility.

The Sandia Corporation proposes to operate this facility (SPRF) within its controlled area approximately 4 miles from the City of Albuquerque. The assembly, patterned after Godiva II currently in operation at the Los Alamos Scientific Laboratory, is made of fully enriched uranium fabricated in several pieces. This assembly will normally not be operated in the same manner as a conventional reactor. The absence of heat removal provisions limits the average power to very low levels and results in a correspondingly low inventory of fission products. This reactor is located in an area separated from other installations and is provided with adequate protection.

It is the opinion of the Committee that there is reasonable assurance that the operation of the SPRF will not endanger the health and safety of the general public.

However, in view of the unusual character of pulsed supercritical facilities, the Committee would like to stress that this type of device presents peculiar hazards to the local operators. The Committee recommends that approvals for this class of reacting devices be limited to those situations where the demands for the unique

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services of pulsed supercritical assemblies are clearly evident. Because of the unusual local risk involved in the operation of a pulsed supercritical assembly, a careful evaluation of the qualifications of the operating staff is necessary and frequent inspections are desirable.

Sincerely yours,

/s/ T. J. Thompson

T. J. Thompson
Chairman

Reference:

SC-4357-A(PF) - Hazards Evaluation of the Sandia Pulsed Reactor Facility (SPRF), dated February 1961.

cc: A. R. Luedecke, GM
H. L. Price, Acting Dir., Regulation
R. Lowenstein, Acting Dir., DI&R