

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

July 5, 1962

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

Subject: REPORT ON ADVANCED TEST REACTOR

Dear Dr. Seaborg:

At its forty-second meeting on June 28-30, 1962, the Advisory Committee on Reactor Safeguards considered the Advanced Test Reactor (ATR) under construction at the National Reactor Testing Station. The suitability of this site for a test reactor of this general type was commented on by the Committee in its letter of November 7, 1960. On June 18, 1962, a subcommittee of the ACRS met in Boston, Massachusetts with representatives of EBASCO Services, Inc., Babcock & Wilcox Company, Phillips Petroleum Company, and personnel from the AEC Staff.

The ATR is a 250 MW(th) pressurized test reactor of novel design being built to provide additional experimental loop irradiation space for the AEC testing program. A description of the reactor and facility design was presented by the contractor personnel. The Committee also had the benefit of the report referenced below, and an analysis by the AEC Regulatory Staff.

In order to provide an environment for the development and testing of advanced fuel and reactor components, this reactor must be designed close to the limits of existing reactor technology, exceeding the experience of the MTR and ETR. An intensive R&D program has therefore been established. While the results of this program cannot be prejudged, the Committee is satisfied that the effort is adequate to provide the necessary information in time to establish safe operating limitations.

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The Committee was informed of the provisions being planned for minimizing the interactions of the several test reactors in the MTR - ETR - ATR complex. These include operational controls by the operating contractor, and expansion of the common utility services.

Realizing that several features of the reactor have yet to be resolved, it is the opinion of the ACRS that the ATR can be constructed at NRTS with reasonable assurance that it can be operated without undue risk to the health and safety of the public.

Sincerely yours,

/s/ F. A. Gifford, Jr.

F. A. Gifford, Jr.
Chairman

Reference:

IDO-24040 - ATR PRELIMINARY SAFETY ANALYSIS REPORT - April 1962.