

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

October 15, 1964

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

Subject: REPORT ON NINE MILE POINT NUCLEAR STATION

Dear Dr. Seaborg:

At its fifty-eighth meeting held on October 7-10, 1964, the Advisory Committee on Reactor Safeguards considered the application of the Niagara Mohawk Power Corporation to construct a nuclear power plant to be located on Lake Ontario about seven miles from the City of Oswego, New York. This nuclear plant is to be a direct cycle boiling water reactor capable of generating 1538 MW(t) and approximately 525 MW(e). Pressure absorption containment will be used. The Committee had the benefit of oral presentations by representatives of the Niagara Mohawk Power Corporation, its contractors and consultants, the AEC Regulatory Staff and of the documents listed herewith. In addition, a subcommittee meeting was held at the site on June 10, 1964.

Proposed seismic design criteria are considered adequate. Calculated off-site exposures are based on limited data on halogen retention, and the consequences in the unlikely event of major accidents may be more severe than estimated. However, the Committee believes that more conservative assumptions would not make the proposal unacceptable. The general design and site appear to be satisfactory.

While all design details are not complete, there appear to be no insurmountable safety problems. However, technical analyses with emphasis on certain areas should be developed further as design and construction progress. These areas include: burn-out ratio as affected by recirculation control; limitations on the maximum reactivity of individual control rods; the poison injection system; the core spray system; adequacy of dry-well and suppression-pool heat removal systems; control and safety instrumentation; turbine by-pass action and its effect on core power; possibility of zirconium-water reaction with resulting hydrogen generation in the unlikely event of a major accident.

With due regard to the above comments, the Advisory Committee on Reactor Safeguards believes that the proposed reactor can be constructed at the site selected with reasonable assurance that it can be operated without undue risk to the health and safety of the public.

Sincerely yours,

/s/
Herbert Kouts
Chairman

References:

1. Exhibit D, Preliminary Hazards Summary Report, Nine Mile Point Nuclear Station, Volumes I and II, Niagara Mohawk Power Corporation, dated April 1964.
2. Exhibit D (Supp. 1), First Supplement to Preliminary Hazards Summary Report, Nine Mile Point Nuclear Station, Niagara Mohawk Power Corporation, dated August 1964.