November 12, 1958

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

Subject: PROPOSED NUCLEAR POWER REACTOR FOR THE CITY OF PIQUA, OHIO

Dear Mr. McCone:

At its Tenth Meeting on October 16, 1958, the Advisory Committee on Reactor Safeguards reviewed the Organic Moderated Reactor proposed for installation at the Piqua Municipal Power Plant as a nuclear steam generator. Discussions of the proposal were held with the Division of Licensing and Regulation, representatives of the City of Piqua Municipal Power Commission and Atomics International. In addition, the Committee had available for reference purposes the Preliminary Safeguards Report on the project, NAA-52-3100, and the report of the Hazards Evaluation Branch dated October 14, 1958.

Although the Committee is favorably impressed with the organic moderated reactor concept, and is aware of the generally favorable results of the OMRE experience to date, it wishes to reaffirm its opinion that the Piqua site proposed on October 16 for installation of a nuclear power plant based on this concept is unsuitable. That site is in an urban area and makes no provision for an exclusion zone. Both the meteorological and the hydrological conditions are unfavorable to the safe dispersal of radioactive by-products. The organic moderator presents a local fire hazard which is increased by the inclusion of a decay heat removal system employing a xylene boiler.

Representatives of Atomics International and the City of Piqua appeared before the Committee at its Eleventh Meeting on November 6, 1958, with oral proposals for a new location for the reactor farther removed from the populated area, and for better containment of the facility. Because of the preliminary nature of the information presented, the Committee has no basis for arriving at any firm conclusion with respect to these new proposals. However, it can be said that the proposed new location with its approximately quarter mile removal from immediately populated areas is an improvement over the site previously proposed; and, with adequate containment provisions, may prove to be acceptable for a reactor of the general type proposed.

Chairman C. Rogers McCullough did not participate in these reviews or discussions.

Sincerely yours,

/s/

cc: P.F.Foster, GM H.L.Price, DLR

R. C. Stratton
Acting Chairman