WEST[illegible] TESTING REACTOR
P.O. Box [illegible]
Pittsburgh 30, Pennsylvania
Phone - Yukon, Pa. 2-3011

April 11, 1959

Mr. Charles McCallum
United States Atomic Energy Commission
Division of Licensing
Washington 25, D. C.

DOCKET NO. 70-133
Suppl. Only

Dear Mr. McCallum:

It was pointed out by Clevite Research Laboratories that additional information on the criticality of the WTR fuel elements is needed for the AEC to approve shipment of new fuel using the Westinghouse fuel shipping boxes. It was thought by Clevite that only information pertaining to the criticality of the fuel elements inside the boxes was required by the AEC. I believe that the following information will suffice.

Enclosed is a report entitled "A Criticality Study of WTR Fuel Assemblies" which explains the minimum number of WTR fuel elements required to go critical with optimum geometry in water, assuming neutron leakage is from a cylindrical core rather than from the actual lattice array of cylindrical elements. The minimum number of elements required to reach criticality based on this pessimistic assumption is 17 elements. The actual number of elements required may be as high as 22. } Encl 2 to Clevite 4/14/59 letter for info.

Clevite will be contacting you in the near future to obtain your approval in addition to the Bureau of Explosives approval which has been already obtained under Bureau of Explosives permit number 522. Since Clevite would like to start shipments to Westinghouse on April 17, 1959, your prompt consideration will be greatly appreciated.

Yours truly,

A. Parks Honeywell

A. Parks Honeywell
Reactor Operating Supervisor
Technical Operations

cc: Mr. Donald Berger, Clevite Research Laboratories
cc: Mr. R. B. Rice, Westinghouse Testing Reactor
cc: Mr. A. J. Pressesky, Westinghouse Testing Reactor

09-211

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