

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

December 13, 1960

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

Subject: SHIPPINGPORT PRESSURIZED WATER REACTOR

Dear Mr. McCone:

On December 7, 1960, as a part of its thirtieth meeting, the Advisory Committee on Reactor Safeguards met at the site of the Shippingport Pressurized Water Reactor. Representatives of the AEC staff, Westinghouse and Duquesne Light Company participated. A resume describing the origin, development and up-to-date reactor and power-plant operation experience, including refueling, was presented. This included a description of the coordination of the responsibilities of the AEC, Westinghouse and Duquesne covering normal operation, test procedures, and personnel training.

Future operation including the proposed design and operational changes required with the installation of PWR Core #2 was described. The ACRS had been furnished previously with a description of the proposed PWR Core #2 and with an AEC staff review. The change-over to accommodate PWR Core #2, which increases the power level to 505 Mw thermal and will increase the fission product inventory, will require major revisions in the mechanical design of the reactor and its components including heat dissipation equipment.

Based upon the preliminary evaluations submitted, the ACRS believes that the proposed modifications including Core #2 will not significantly change the present safety status. However, it is suggested that during the design development period, consideration be continued toward developing methods for routine integral testing of the leakage rate of the containment vessel, methods to reduce the leakage rate, and improvements in the effectiveness of the safety injection system.

Sincerely yours,

/s/  
Leslie Silverman  
Chairman

cc: A. R. Luedecke, GM  
W. F. Finan, AGMRS  
H. L. Price, Dir., DL&R

References:

Experience with the PWR Reactor Plant Container, WAPD-PWR-1318 dated July 1960.

Safeguards Aspects of PWR Core 2, WAPD-PWR 2191, July 1960.

Shippingport Operations, from Start-up to First Refueling, Dec. 1957 to Oct. 1959, undated.

The First Refueling of the Shippingport Atomic Power Station, WAPD-233 dated July 1960.