

JAN 7 1987

Docket No. 50-309

MEMORANDUM FOR: Ashok C. Thadani, Director  
PWR Project Directorate #8  
Division of PWR Licensing-B

FROM: Patrick Sears, Project Manager  
PWR Project Directorate #8  
Division of PWR Licensing-B

SUBJECT: TRIP REPORT CONCERNING MAINE YANKEE ATOMIC POWER STATION  
SPENT FUEL POOL MASONRY WALL FAILURE CONSEQUENCE ANALYSIS

On December 18-19, 1986, the following NRC and contract personnel met with W. Henries of Yankee Atomic Electric Company in Framingham, MA:

Patrick Sears	NRR
P. T. Kuo	NRR
John Ma	NRR
O. Okailey	Franklin Inst.

Calculations concerning the consequences to the Maine Yankee spent fuel racks were examined and the following conclusions were reached:

1. Assumptions regarding the failure mode of the masonry wall are acceptable.
2. Calculational methods regarding impact energy of the wall segments impacting the spent fuel racks along with the hydrodynamic effects are acceptable.
3. The calculational assumption concerning the elasto-plastic material properties of the spent fuel racks is acceptable.
4. The buckling loads and deformation due to fuel bundle impact do not represent a lower bound calculation. Maine Yankee agreed to perform subsequent analyses to show that wall segment impact energy does not cause more than the maximum allowable deformation which is reported to be 11 inches.

Original signed by

Patrick Sears, Project Manager  
PWR Project Directorate #8  
Division of PWR Licensing-B

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Mr. J. B. Randazza  
Maine Yankee Atomic Power Company

Maine Yankee Atomic Power Station

cc:

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