



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

April 24, 1979

MEMORANDUM FOR: Victor Stello  
FROM: NRR Technical Review Group  
SUBJECT: SYSTEMS ANALYSES OF FILLING AND OPERATION  
OF OTSG "B" WATER SOLID

We have reviewed the preliminary procedure of filling OTSG "B" solid with water and the conceptual transition of placing OTSG "B" in operation while the steaming OTSG "A" would be converted to water solid operation. Enclosed is our evaluation.

  
NRC Technical Review Group

Enclosure:  
Water Solid Filling and  
Operation of OTSG "B"

cc w/enclosure:  
R. Mattison  
NRC Technical Group (4)

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WATER SOLID FILLING AND OPERATION OF STEAM GENERATOR "B"

Present leakage rates of the OTSG "B" tubes provides an opportunity to fill the OTSG "B" water solid. We have reviewed draft procedures for this operation to see that precautions would be taken to avoid water hammer in the steam line and any other adverse effects. We have not identified any significant risk with operation of OTSG "B" in a water solid mode.

We support the procedure which suggest that precautions be followed when filling the secondary side of OTSG "B" slowly in order to avoid water hammer.

The steam line to the isolation valves and the turbine bypass line to the turbine bypass control valve will be filled with water. To avoid potential water hammer, we recommend that the emergency steam generator feed pump be secured. The OTSG "B" cooling will be brought on line by cracking open the turbine bypass valve.

Once the steam generator "B" side filling process has been completed transition will take place to fill steam generator "A" side water solid. The licensee has informed us that during this transition, the OTSG "B" flow rate will start and gradually increase while simultaneously the operating OTSG "A" side will be controlled (by throttling turbine valves) to decrease cooling. Once the OTSG "B" has taken up the full load, OTSG "A" will be isolated and filled water solid by the same procedure followed with OTSG "B". We agree

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with the above described concept, however, details of valve line up and checks for proper filling indications will be reviewed as part of the staff's review of the operating procedure for entering this mode of operation.

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