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

SEP 0 6 1979

MEMORANDUM FOR: C.J. Heltemes, Chief, Project Management, Bulletins & Orders Task Force

FROM: Z.R. Rosztoczy, Chief, Analysis Branch, Bulletins & Orders Task Force

SUBJECT: ADDITIONAL INFORMATION NEEDS FROM B&W ON CONCERNS OF C. MICHELSON

C. Michelson of TVA has identified a number of concerns which were originally addressed to CE System 80 designs. These concerns however, were considered applicable to PWRs in general, and as such were also forwarded to Westinghouse for response.

These concerns however, have not been forwarded to or addressed by B&W.

In order to complete our writeup for NUREG-0565, we will need responses to these concerns (enclosed) by October 11, 1979. We therefore request that they be forwarded to B&W immediately.

Zoltan R Rosztoczy

Z.R. Rosztoczy, Chief
Analysis Branch
Bulletins & Orders Task Force

cc: D. Ross
T. Novak
S. Israel
R. Capra

Enclosure

C. Michelson Concerns

Are sources of auxiliary feedwater adequate in the event of a delay in cooldown subsequent to a small LOCA?

Is the recirculation mode of operation of the HPSI pumps at high pressure an established design requirement?

Are the HPSI pumps and RHR pumps run simultaneously? Do they share common piping?/suction? If so, is the system properly designed to accommodate this mode of operation (i.e., are any NPSH requirements violated, etc...?)

Mechanical effects of slug flow on steam generator tubes needs to be addressed (transitioning from solid natural circulation to reflux boiling and back to solid natural circulation may cause slug flow in the hot leg pipes).

Is there minimum flow protection for the HPSI pumps during the recirculating mode of operation?

The effect of the accumulators dumping during small break LOCAs is not taken into account.

What is the impact of continued running of the RC pumps during a small LOCA?

During a small break LOCA in which offsite power is lost, the possibility and impact of pump seal damage and leakage has not been evaluated or analyzed.

During transitioning from solid natural circulation to reflux boiling and back again, the vessel level will be unknown to the operators, and emergency procedures and operator training may be inadequate. This needs to be addressed and evaluated.

The effect of non-condensible gas accumulation in the steam generators and its possible disruption of decay heat removal by natural circulation needs to be addressed.

Delayed cooldown following a small break LOCA could raise the containment pressure and activate the containment spray system. Impact and consequences need addressing.