

COCK & WILCOX COMPANY  
ENERATION GROUP

UNITED STATES NUCLEAR COMMISSION  
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F. Hallman, Manager, Plant Performance Services Section (2149)

cc: E. R. Kane  
J. D. Phinney  
B. W. Street  
B. M. Dunn  
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KELLY MEMO  
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Operator Interruption of High Pressure Injection (HPI)

This letter is cover one customer and one subject only.

- References:
- (1) B. M. Dunn to J. Taylor, same subject, February 9, 1978.
  - (2) B. M. Dunn to J. Taylor, same subject, February 16, 1978.

References 1 and 2 (attached) recommend a change in BSW's philosophy for HPI system use during low-pressure transients. Basically, they recommend leaving the HPI pumps on, once HPI has been initiated, until it can be determined that the hot leg temperature is more than 50°F below T<sub>sat</sub> for the RCS pressure.

Nuclear Service believes this mode can cause the RCS (including the pressurizer) solid. The pressurizer reliefs will lift, with a water surge through the large piping into the quench tank.

We believe the following incidents should be evaluated:

1. If the pressurizer goes solid with one or more HPI pumps continuing to operate, would there be a pressure spike before the reliefs open which could cause damage to the RCS?
2. What damage would the water surge through the relief valve discharge piping and quench tank cause?

To date, Nuclear Service has not notified our operating plants to change HPI policy consistent with References 1 and 2 because of our above-stated questions. Yet, the references suggest the possibility of uncovering the core if present HPI policy is continued.

We request that Integration resolve the issue of how the HPI system should be used. We are available to help as needed.

*D. F. Hallman*

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DFH/fch  
Attachments

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