

ILLINOIS POWER COMPANY



CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

DPH-0858-88
September 28, 1988

Docket No. 50-461

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Clinton Power Station
Response to Bulletin 88-08

Dear Sir:

This letter is in response to Bulletin 88-08, "Thermal Stresses in Piping Connected to Reactor Coolant Systems". Illinois Power Company (IP) reviewed all piping systems connected to the Reactor Coolant System (RCS) and determined that only the following systems could be subject to thermal stratification:

- ° High Pressure Core Spray (HP)
- ° Reactor Core Isolation Cooling (RI)
- ° Standby Liquid Control (SC)

These systems meet the following criteria which were discussed in the Bulletin:

- ° Unisolable sections of piping connected to the RCS with an isolation valve which could leak.
- ° The pressure upstream from the isolation valve could exceed RCS pressure.
- ° The temperature upstream is significantly cooler than the RCS temperature.

These systems were evaluated further, and it was determined that during normal operation the HP and RI systems are at a pressure lower than the RCS. During testing of the HP and RI systems, the pressure of these systems could exceed the RCS pressure. However, testing is only for a short duration (approximately one hour) and is only performed once in three months. IP has analyzed the HP and RI systems and has determined that if leakage through the isolation valves occurs, the duration and frequency of testing is insufficient to cause thermal cycling stresses beyond the American Society of Mechanical Engineers (ASME) Code allowables.

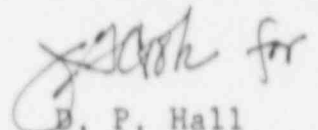
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It was also determined that during normal operation the SC system is at a pressure lower than the RCS. During testing of the SC system, the SC system pressure will exceed the RCS. However, the system is isolated by an explosive valve with the disc brazed to the seat, and leakage through this valve is not expected.

Therefore, it has been determined that there are no unisolable sections of piping connected to the RCS that can be subjected to excessive thermal cycling stresses and no additional actions were required by this bulletin.

I hereby affirm that the information in this letter is correct to the best of my knowledge.

Sincerely yours,


D. P. Hall
Vice President

DPH/pgc

cc: NRC Clinton Licensing Project Manager
NRC Resident Inspector
Regional Administrator, Region III, USNRC
Illinois Department of Nuclear Safety