



Commonwealth Edison
Byron Nuclear Station
4450 North German Church Road
Byron, Illinois 61010

January 12, 1985

LTR: BYRON 85-0051

Mr. James G. Keppler
Regional Administrator
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

This special report is submitted in accordance with Byron Station, Unit 1 Operating License NPF-23, Appendix A, Technical Specification 3.4.9.3 Action Statement C, reporting the use of the Residual Heat Removal System (RH) suction relief valves as a means of mitigating RCS pressure.

In two separate occurrences, the RH suction relief valves lifted due to an RC-RH pressure transient. These two occurrences and an explanation of events leading to the lifting of the RH suction relief valves are described as follows:

The first occurrence was on 12-28-84. The suction relief valve, 1RH8708A, for the Residual Heat Removal System lifted on a high pressure transient. The valve lifted during the restoration of the RH loop following the performance of surveillance procedure BVS 0.5-2.SI.3, which required the stroke timing of the containment sump valves, 1SI8811A and B.

To stroke these valves, the RH suction piping was drained to prevent water from entering the containment sump. After the surveillance was successfully performed, the suction piping was refilled and repressurized using the chemical volume letdown path through valve 1RH8734A. During this process, the RH pump, 1RH01PA, discharge check valve, 1RH8730A, failed to seat properly, and as a result the suction header was pressurized to approximately 460 psig lifting the suction relief valve. The Unit Operator stroked the 1RH8734A valve to reseal the check valve (1RH8730A). The pressure transient was terminated upon the Unit Operator's actions. The operating procedure was revised to ensure this method of repressurization of the Residual Heat Removal System loop is not used during normal operating conditions.

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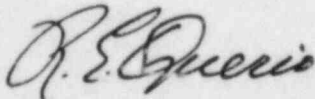
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The second event occurred on 12-30-84. Suction relief valve, 1RH8708B, for the "B" Train RH, lifted on a high pressure transient. The valve lifted during the restoration of the RH loop following the performance of surveillance procedure, BVS 0.5-2.SI.2. The "B" Train RH suction piping was filled and vented. To repressurize the line, the RH mini flow control valve was manually opened causing a pressure transient on the suction piping and lifting the Residual Heat Removal System suction relief valve.

The problem was initially attributed to the possible leaking of the Residual Heat Removal System crosstie valves 1RH8716A/B, but it was later found, by leak testing both crosstie valves, that the Residual Heat Removal System outlet to the letdown heat exchangers, valves 1RH8734A/B were the problem. A work request was generated to correct the problem. The valves were relapped and functionally checked under the work request. The leakage was found acceptable.

The above report is a summary of the events occurring on 12-28-84 and 12-30-84 dealing with the RH suction relief valve lifting due to two separate pressure transients. The actual follow up to the 1RH8734A/B leak is documented by work request number B14044. This report is submitted in lieu of an LER.



R. E. Querio
Station Superintendent
Byron Nuclear Power Station

REQ/RG/vda

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