

## LER 366/83-069, Rev. 1

Event Description: Reactor Scram with HPCI Unavailable

Date of Event: July 22, 1983

Plant: Hatch 2

### Summary

On July 22, 1983, one of the two reactor feed pump turbines at Hatch caught on fire. While operators were reducing load in response to the fire, a reactor scram occurred. During testing on July 31, 1983, the high- pressure coolant injection (HPCI) pump controller was determined to be failed and HPCI was declared inoperable. HPCI was repaired and returned to service on August 2, 1983.

It is assumed that the second reactor feed pump operated successfully during the reactor trip on July 22. HPCI is assumed to be have been unavailable for half of the one-month surveillance interval prior to July 31, rendering it unavailable at the time of the scram. This event was modeled as a reactor scram with HPCI unavailable, and HPCI was assumed to be not recoverable. The conditional core damage probability estimated for this event is  $6.2 \times 10^{-6}$ . The dominant core damage sequence involves the observed transient, failure of the power conversion system, failure of two safety relief valves (SRVs) to close, the HPCI unavailability, and failure of the automatic depressurization system (ADS).