

LER 333/82-009

Event Description: Reactor Trip with High-Pressure Coolant Injection System Inoperable

Date of Event: February 23, 1982 through March 9, 1982

Plant: Fitzpatrick

Summary

On February 10, 1982 during shutdown for refueling, it was discovered that the high-pressure coolant injection (HPCI) system high steam flow set point in the plant Technical Specifications was in error. On March 10, a trip occurred. Two days later, the high-pressure coolant injection system isolated during a startup test due to a high steam flow signal.

It is assumed that the HPCI system was unavailable during the trip since it isolated two days after the trip occurred. In the analysis, the HPCI system was therefore assumed unavailable. The non-recovery probability was set equal to 0.55 to reflect the possibility that the failure might be recovered at the pump. The conditional core damage probability estimated for this event is 4.8×10^{-6} . The dominant core damage sequence involves the transient, successful reactor shutdown, failure of the power conversion system, success of main feedwater, and failure of the residual heat removal (RHR) system.