

LER 395/83-045

Event Description: Turbine-Driven Auxiliary Feedwater Pump Inoperable Due to Incorrectly Set Speed Control

Date of Event: May 31, 1983

Plant: Summer

Summary

On May 31, 1983, while operating at 100% power, the speed control for the turbine-driven auxiliary feed water (TDAFW) pump was found to be in the "slow" (minimum) speed position rather than the "fast" position. The controller was immediately placed in the "fast" position. The cause of this incorrect setting was operator error and procedural deficiencies. At the time of the event, the two motor-driven auxiliary feedwater (AFW) pumps were operable. With the controller in the "slow" position, the TDAFW pump will not deliver sufficient flow to meet operability requirements. Six and three days prior to this event, the plant experienced trips.

If the TDAFW pump is assumed to be tested on a monthly basis and the failure is assumed to have existed for half of a test interval, then this event may be analyzed as a trip with the AFW pump turbine unavailable. The conditional core damage probability estimated for this event is 4.6×10^{-6} . The same calculation is applicable to the earlier trip as well. The dominant accident sequence consists of a successful trip following the transient, failure of the remaining AFW trains, failure of main feedwater, and failure of feed and bleed.