

LER 327/83-077

Event Description: Reactor Trip with Train A of Auxiliary Feedwater Unavailable

Date of Event: May 31, 1983

Plant: Sequoyah 1

Summary

Two days after a reactor trip, automatic control valve 1-PCV-3-122 in train A of the auxiliary feed water (AFW) system was declared inoperable due to failure to operate correctly. The failure was due to a clogged hydraulic valve and a worn hydraulic pump, which caused the motor to fail due to excessive current. Valve 1-PCV-3-122 is located in the discharge line of the motor-driven pump (MOP) in train A. Since this was inoperable, the train A MOP could not supply water to the steam generators.

The analysis assumed the valve was inoperable at the time of the trip, and train A was modeled in the analysis as failed. The analysis showed that the dominant accident sequence was the result of AFW failure. The conditional core damage probability was 9.8×10^{-6} . The dominant accident sequence comprised 4.9×10^{-6} of this total, with four other sequences contributing an additional 4.9×10^{-6} .