

December 20, 1995

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-IV-95-057A

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by Region IV staff in Arlington, Texas on this date.

Facility

Entergy Operations, Inc.  
River Bend 1  
St Francisville, Louisiana  
Dockets: 50-458

Licensee Emergency Classification

Notification of Unusual Event  
Alert  
Site Area Emergency  
General Emergency  
X Not Applicable

Subject: UNIDENTIFIED REACTOR COOLANT SYSTEM LEAKAGE EXCEEDED 5.0 GPM

On December 19, 1995, while operating at 85 percent power, the operators manually scrammed the reactor in response to reactor recirculating pump trips. The plant responded normally; however, reactor coolant system unidentified leakage increased from 2.5 to 5.6 gpm, which exceeded the Technical Specification limit of 5.0 gpm. A Notification of Unusual Event (NOUE) was declared until the source of leakage was identified and isolated.

The leak was identified as the packing on the testable check valve on the high pressure core spray injection line. The leak was successfully isolated by closing the manual isolation valve between the leaking check valve and the reactor pressure vessel. At 3:26 p.m. (CST) on December 19, 1995, the NOUE was exited by the licensee. The leak was repaired by repacking the valve. As of December 20, reactor coolant system unidentified leakage had decreased to 1 gpm.

It was initially identified that Recirculation Pump B had tripped because the water from the testable check valve had leaked on the pump. The licensee determined that this was not the cause of the pump trip. The licensee established the cause of the reactor recirculation pump trips to be the net positive suction head, or cavitation, interlock. This interlock compares reactor steam dome saturated temperature with pump suction temperature. If the temperature difference becomes too small, cavitation is prevented by not permitting the pump to start or by tripping a running pump. A combination of instrument drift, operating at high recirculation pump flow, reduced reactor power, and reduced reactor pressure (to minimize the unidentified leakage that was already approximately 2.5 gpm), caused a reduction in the operating margin for this parameter. As a result, the cavitation interlock feature tripped Reactor Recirculation Pump B, and then Pump A downshifted to slow speed as a result of Pump B tripping. The instruments associated with the cavitation interlock were recalibrated, and with the leak repaired, the licensee will return the plant to normal operating pressure. The licensee is preparing to start up and resume power operations today.

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Region IV received this update by telephone from the Senior Resident Inspector at 7:30 a.m. (CST), on December 20, 1995. Region IV has informed EDO/NRR/PA.

The information herein has been discussed with the licensee and is current as of 9:00 a.m. (CST), on December 20, 1995.

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