

May 23, 2007

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-07-005

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 the Region IV, Arlington, Texas, staff on this date.

**Facility**

River Bend Station  
Entergy Operations, Inc.  
St. Francisville, Louisiana  
Docket No: 50-458  
License No: NPF-47

**Licensee Emergency Classification**

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

SUBJECT: REACTOR SHUTDOWN DUE TO UNEXPECTED CHANGE IN RECIRCULATION FLOW

DESCRIPTION:

On May 22, 2007, at 10:36 p.m. (CDT), the River Bend Station was shutdown due to an unexpected change in recirculation flow in the A reactor recirculation loop. The reactor was shutdown to facilitate licensee investigation for the cause of the flow change. The recirculation system provides forced circulation of water through the reactor.

On May 21, 2007, at 11:59 p.m. reactor recirculation loop 'A' flow unexpectedly lowered, without any change in the reactor recirculation flow control valve 'A' position. The licensee balanced flows between the two reactor recirculation loops to meet Technical Specification requirements and maintained power operation at 90 percent throughout the day while evaluating the unexpected change in flow. The cause for the flow change was not identified and the licensee decided to shutdown the reactor to support further inspections of the recirculation system.

The plant is currently being cooled to cold shutdown conditions and the licensee has formed several teams to further investigate the unexpected change in recirculation flow.

The onsite NRC resident inspectors are monitoring licensee investigation activities.

This information has been discussed with the licensee and is current as of 1:00 p.m. on May 23, 2007.

ADAMS ACCESSION NUMBER: ML071430449

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