September 24, 2007

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-II-07-011

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 II staff (Atlanta, Georgia) on this date.

Facility	**Licensee Emergency Classification**
Browns Ferry Nuclear Plant	Notification of Unusual Event
Unit 3	Alert
Athens, AL	Site Area Emergency
Docket/License: 05000296/DPR-68	General Emergency
	X Not Applicable

Subject: BROWNS FERRY UNIT 3 PRESSURE BOUNDARY LEAKAGE DISCOVERED DURING DRYWELL INSPECTION

On September 22, the licensee conducted a planned shutdown of Unit 3 due to increasing reactor coolant system leakage (RCS) inside the drywell. For the past seven months, the RCS unidentified leakage had steadily increased to approximately 2.11 gpm. The principal source of this leakage was known to be a body to bonnet leak from an un-isolatable manual valve on the reactor water cleanup suction line. The Unit 3 drywell was de-inerted, and the licensee began to downpower Unit 3 on September 21, 2007, at 11:00 p.m., from 100% power. The unit was manually scrammed from approx. 20% power at 9:00 a.m., on September 22, at which time the licensee promptly began their leak inspections of all accessible areas and levels of the drywell.

On September 22, 2007, at 12:45 p.m., while in Mode 3, the licensee discovered a weld defect at an elbow in an one inch test line off the Loop II Residual Heat Removal (RHR) injection header during their drywell inspection. The defect was a through wall weld crack in an ASME Code Class 1 pipe that was classified as pressure boundary leakage. The leak rate was estimated by visual observation to be about 0.25 gpm. Subsequent preliminary investigation results indicated the cause of the weld defect was cyclic fatigue caused by inadequate structural support due to missing U-bolts for securing the line to its intended structural support. Pursuant to the Technical Specifications and the Technical Requirements Manual, Unit 3 was cooled down, depressurized, and entered Mode 4 at 7:10 p.m., on September 22. The unit will remain in Mode 4 until a code repair of the defective pipe is made. Unit 1 and 2 remain at full power and are not affected by this event.

The resident inspectors are monitoring RCS leak repair activities. No media inquires have been received and the licensee currently has no plans for a press release.

The State of Alabama has been informed. The information in this preliminary notification has been reviewed with licensee management, and is current as of 10:00 a.m., on Monday, September 24, 2007.

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