

**PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-II-07-008**

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**

St. Lucie Nuclear Plant  
 Unit 2  
 Jensen Beach, Florida  
 Docket/License: 05000389/NPF-16

**Licensee Emergency Classification**

Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency

X Not Applicable

Subject: ST. LUCIE UNIT 2 SHUTDOWN TO REPAIR REACTOR COOLANT PUMP SEAL INJECTION LINE LEAK

On August 18, 2007, at 4:03 p.m., EDT, a planned Unit 2 manual reactor trip was initiated based on increased unidentified reactor coolant system (RCS) leakage. The RCS unidentified leakage had increased from 0.16 gpm to 0.45 gpm over a two day period and surpassed the limit of 0.25 gpm above background established by a plant Operational Decision Making (ODM) plan. The downpower was initiated on August 18, 2007, at 10:35 a.m., EDT from 100% power. Following the manual reactor trip, EOP-1, Standard Post Trip Actions, and EOP-2, Reactor Trip Recovery procedures were completed and the unit was stabilized in Mode 3. No significant equipment failures were identified. The plant was cooled down and entered Mode 5 on August 19, 2007, at 3:09 p.m., EDT.

On August 19, 2007, at 5:00 p.m., EDT, while in Mode 5, a containment walkdown confirmed the 2B1 RCP Seal injection line to be the only active RCS leakage source. The leak is unisolable from the RCS and is located at or adjacent to a socket weld on the 3/4" Class 1 Schedule 160 seal injection line. The cause for the leak at the weld has not been determined at this time. The unit will remain in Mode 5 until a leak repair is made to the seal injection line. Unit 1 is currently at 100 percent power.

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

The State of Florida will be informed. The information in this preliminary notification has been reviewed with licensee management, and is current as of 11:00 a.m., on Monday, August 20, 2007.

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