

April 30, 2013

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-13-002B

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

Arkansas Nuclear One, Units 1 and 2
Entergy
Russellville, Arkansas
Dockets: 05000313; 05000368
License Nos. DPR-51; NPF-6

Licensee Emergency Classification

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

SUBJECT: UPDATE: ARKANSAS NUCLEAR ONE UNIT 2 REACTOR TRIP AND
NOTIFICATION OF UNUSUAL EVENT

DESCRIPTION:

This preliminary notification supplements information in PNO-IV-13-002A, issued to describe the event that occurred at Arkansas Nuclear One (ANO), Units 1 and 2 on March 31, 2013 (ADAMS ML13092A024 and ML13099A244). During transfer of the 500 ton ANO Unit 1 main generator stator, the lifting rig failed. The main generator stator fell approximately 30 feet into the train bay and caused structural damage to the Unit 1 turbine building. For ANO Unit 1, which was in a refueling outage, this drop caused a loss of offsite power. This resulted in the Unit 1 Emergency Diesel Generators (EDGs) operating to provide power to vital electrical loads. ANO Unit 2 experienced a reactor trip from 100 percent power after the falling stator and crane components caused a reactor coolant pump electrical breaker to open. About 1.5 hours later, water from a damaged fire suppression system piping resulted in loss of power to one vital electrical bus and a Notification of Unusual Event. The associated EDG for Unit 2 started and supplied power to safety related equipment.

On April 8, 2013, the Nuclear Regulatory Commission sent an Augmented Inspection Team (AIT) to assess the circumstances surrounding the March 31, 2013 incident. The team reviewed the Unit 1 loss of offsite power and the Unit 2 reactor trip and subsequent Notification of Unusual Event. The AIT has scheduled a public exit meeting to discuss its findings on May 9, 2013.

Update: The licensee's actions for Unit 1 have focused on assessing damage to the plant and restoring the electrical distribution system. The licensee has restored offsite power to the safety related equipment with a temporary modification from startup transformer 1, and has offloaded the core to the spent fuel pool. This will permit additional needed repairs to the electrical distribution system.

The licensee inspected Unit 2 for damage, evaluated the cause of the reactor trip, and reviewed the safe shutdown of the reactor. Minor equipment damage was repaired, and the licensee concluded that the plant responded as expected during the event. On April 28, 2013, the licensee restarted Unit 2.

The NRC assessed the repairs to the Unit 2 electrical busses, reviewed the Unit 2 post-transient trip report and inspected the containment to ensure it was safe to restart. The inspectors also assessed the adequacy of the Unit 2 turbine building structure and selected support systems for power operation, as well as the scope of the licensee's pre-restart work plans. The inspectors observed portions of Unit 2 restart.

Unit 1 remains shutdown for a refueling outage. The NRC continues to monitor the outage, stator and crane component removal efforts, and activities for fully recovering offsite power.

This preliminary notification is issued for information only and will be updated again as necessary as more information becomes available.

This information presented herein has been discussed with the licensee and is current as of 10:00 a.m. CDT on April 30, 2013.

CONTACTS:

Don Allen, Branch Chief, 817-528-3439

Fred Sanchez, Senior Resident Inspector ANO, 479-857-9199

ADAMS ACCESSION NUMBER: ML13121A273