

September 27, 2012

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-II-12-003A

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. Some of the information may not yet be fully verified or evaluated by the Region II staff.

Facility

Brunswick Steam Electric Plant, Unit 1
Duke Energy
Southport, NC
Docket: 50-325

Licensee Emergency Classification

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

SUBJECT: UPDATE - UNPLANNED SHUTDOWN GREATER THAN 72 HOURS ON SEPTEMBER 16, 2012, DUE TO POTENTIAL 1B RECIRCULATION PUMP SEAL FAILURE

On September 27, 2012, Brunswick operators commenced a reactor startup following a manual reactor shutdown on September 16, 2012, for a forced maintenance outage. Repairs were completed to the 1B recirculation pump seal. As part of the extent of condition, the licensee also replaced the 1A recirculation pump seal. It was determined that the 1B seal had failed as a result of foreign material intrusion, and the likely source is from the seal filter skid installed during the last Unit 1 refueling outage. Preliminary review indicates that the licensee did not specify the appropriate levels of cleanliness and did not adequately flush the system after the work. The resident inspectors closely monitored the licensee's seal repair activities and are currently observing the plant startup. This preliminary notification supplements information in PNO-II-12-003 (see below).

On September 15, 2012, the licensee observed indications that pressure on the number 2 seal for the 1B recirculation pump had increased to 720 psig (normally 590 psig). This indicated that the number 1 seal was potentially failing. The licensee determined that a plant shutdown was warranted. A controlled down power to cold shutdown (Mode 4) commenced early on September 16. The NRC Resident Inspector was on site and monitored the shutdown activities.

This preliminary notification is issued for information only.

The state of North Carolina has been informed.

The information presented herein has been discussed with the licensee and is current as of 8:00 a.m., on September 27, 2012.

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