

November 30, 2011

**PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-II-11-006A**

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 II staff on this date.

**Facility**

**Licensee Emergency Classification**

Carolina Power and Light Company  
Brunswick 2  
Southport, NC  
Dockets: 50-324

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

SUBJECT: **UPDATE** - BRUNSWICK UNIT 2 NOTIFICATION OF UNUSUAL EVENT  
(NOUE) DUE TO REACTOR COOLANT SYSTEM LEAKAGE

This preliminary notification supplements information in PNO-II-11-006. On November 16, 2011, at 3:09 a.m. EST, Brunswick Unit 2 was manually scrammed from 7 percent power and an unusual event was declared due to drywell unidentified leakrate slightly exceeding 10 gallons per minute (gpm). The NOUE was exited at 8:15 a.m. EST on November 16, 2011, when leakage decreased to less than 10 gpm as reactor pressure was reduced. The unit was cooled down and reached cold shutdown at 2:38 p.m. EST on November 16, 2011.

The NRC resident inspector responded to the site immediately to monitor the licensee's response to the event and Region II initiated a Special Inspection. The licensee subsequently determined that the unidentified leakage was the result of inadequate reactor vessel head stud tensioning due to human performance issues during reactor vessel head assembly.

The NRC inspection team has reviewed the licensee's corrective actions to date, observed maintenance activities, and monitored testing of safety systems. The licensee is in the process of restarting Unit 2 and returning it to power operation. The NRC resident inspectors continue to monitor these activities. The inspection team concluded the onsite portion of its review on November 30, 2011, and will issue an inspection report of its findings.

This information is current as of 10:00 a.m. on November 30, 2011.

The State of North Carolina has been informed.

This preliminary notification is issued for information only.

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