

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-II-10-002B

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 Region II staff (Atlanta, Georgia) on this date.

Facility:

Carolina Power and Light Company
H.B. Robinson Steam Electric Plant
Harstville, SC
Dockets/License: 50-261/ DPR-23

Licensee Emergency Classification:

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

SUBJECT: UPDATE - FIRES AFFECTING SAFETY RELATED EQUIPMENT; SPECIAL INSPECTION
UPGRADED TO AN AUGMENTED INSPECTION

This is an update to PNO-II-10-002A, issued on April 15, 2010

On March 28, at 6:52 p.m., H.B. Robinson Steam Electric Plant Unit 2 experienced an automatic reactor trip due to low "B" loop reactor coolant system flow caused by an undervoltage condition on the non-safety related 4kV bus #4 which powers the "B" reactor coolant pump. Following the reactor trip, at 7:00 p.m., a safety injection (SI) occurred due to low pressurizer pressure caused by the post trip cooldown. The plant was stabilized and the licensee initiated an event response team.

At 10:35 p.m. a loud noise and thick smoke in the non-safety 4kV bus #4 room were reported to the control room. At 11:00 p.m. the licensee declared an Alert per Emergency Action Level HA2.1, due to a fire affecting the "A" and "B" DC buses. DC bus grounds were present which affected the safety related buses. The Alert was terminated at 1:34 a.m.

The NRC resident inspectors responded to the reactor trip and monitored the licensee's actions throughout the subsequent events.

On March 30, Region II dispatched a Special Inspection Team (SIT) to H.B. Robinson to assess the circumstances surrounding the event.

On April 12, 2010, the SIT identified additional deficiencies related to the post trip response to this event. Specifically, potential problems related to providing cooling to the reactor coolant pump seals were discovered. Due to the increased risk associated with these new issues, Region II reassessed and determined the need to upgrade the SIT to an Augmented Inspection (AIT), which was dispatched on April 19.

On June 2, 2010, a Category 1 Public Meeting was held to discuss the results of the Augmented Inspection with Progress Energy. The overall AIT conclusion was that the event did not adversely affect the health and safety of the public. There was no radiological release associated with the event, and no operational safety limits were approached or exceeded. The team concluded that this event was initiated by an electrical fault in a cable which had limited design and installation margins. The event was further complicated by additional equipment malfunctions and ineffective operator actions. The team identified a total of fourteen (14) Unresolved items within the Operator Performance and Equipment Performance functional areas.

The team reviewed portions of the licensee's Significant Adverse Condition Investigation Report for the event related to operator and equipment performance. The team concluded that the licensee's investigation report for this event adequately addressed the operator performance issues identified in the AIT report. The team verified the licensee adequately reviewed the operator response to the event and identified factors contributing

to operator performance. The team determined that the licensee adequately identified and documented causes of the operator issues. Immediate corrective actions have been implemented and additional actions were developed. The team concluded that the remedial training provided to operating crews was effective in identifying and correcting individual and crew behavior associated with operational performance gaps. The causes of specific equipment problems were identified and as appropriate, corrective actions were initiated for identified discrepancies.

In accordance with NRC inspection procedures, the Region II staff continues to verify that the licensee has appropriately resolved event related issues. This review will be completed prior to plant restart, which is expected on or about July 10, 2010.

The information presented herein has been discussed with the licensee and is current as of 12:30 p.m., July 7, 2010.

ADAMS Accession Number:

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