

CP&L

Carolina Power & Light Company

H. B. ROBINSON STEAM ELECTRIC PLANT
POST OFFICE BOX 790
HARTSVILLE, SOUTH CAROLINA 29550

JUN 18 1982

USNRC REGION II
ATLANTA, GEORGIA
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Robinson File No: 150-365

Serial: RSEP/82-1091

Mr. James P. O'Reilly
Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Northwest
Suite 3100
Atlanta, Georgia 30303

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
30 DAY SPECIAL REPORT - FIRE DAMPER POWER SUPPLIES

Dear Mr. O'Reilly:

In accordance with Technical Specification (TS) 6.9.3.g this special report on the inoperability of fire dampers is submitted pursuant to TS 3.14.7.2.

With the plant in the refueling shutdown condition with fuel removed from the containment vessel, periodic testing (PT's) revealed inoperability of circuits which would have prevented automatic actuation of fire dampers in certain fire zones. These dampers, however, were capable of closing via fusible links.

Specifically, on April 28, 1982, PT-9.13 revealed a failure in the power supply to the damper relay panel B1 (train B) concurrent with a failed relay for Zone 10 (South Cable Vault) on panel A1 (train A). This resulted in the automatic actuation feature (from both redundant trains) for the fire dampers in Zone 10 being inoperable.

On May 2, 1982 while performing PT-9.14, the power supplies for damper relay panels A2 and B2 were discovered de-energized. This resulted in the loss of the automatic actuation feature (both trains) for the fire dampers in Zone 19 (Cable Spread Room).

Investigation of the above events revealed that although the plant was in a condition not requiring them, these circuits may have been inoperable during previous periods of plant operation, thereby identifying these events as reportable. This was identified on May 21, 1982.

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In the case of panel A1, the relay failure was identified as random; the failed relay was replaced on June 5, 1982; and the circuit was returned to service.

The failure of the B1 panel power supply was attributed to a voltage regulator failure. No specific cause for the failure was determined. The voltage regulator will be replaced upon receipt of materials. If this circuit is not fully restored to operation prior to its being required, the appropriate compensatory actions as outlined in the Technical Specifications will be taken.

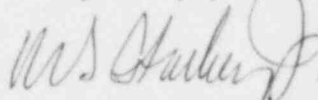
The de-energizing of the A2 and B2 panels was apparently caused by improperly set over-voltage protection (set too low) resulting in spurious opening of the supply breakers. Since the supply breakers (electrical protection) also serve as the on-off switch and by design have no "trip-free" position, a fault-trip of the circuits cannot be easily distinguished from a manual turn-off of the circuit. On this occasion, however, a deliberate effort was made to evaluate the reason for the switches being off. It was found that the resetting of certain alarms created sufficient voltage fluctuations in the power supply to "trip" the switches. Verification of these setpoints was not included in the installation procedures, apparently through oversight. The trip setpoints on the over-voltage devices were set properly, and the circuits were returned to service.

In addition, supervision will be installed in all four circuits to provide annunciation of damper power supply failure or de-energization of the circuit. This supervision should be available, pending procurement of any materials, by September 1, 1982.

The discovery of the above items prompted a thorough review of the entire fire detection actuation system. This review revealed a number of minor deficiencies which have not impacted system operability, but when corrected will provide a substantial improvement in overall system performance and reliability. Correction of these items is currently in progress and is expected to be completed by December 31, 1982.

If you have any questions, please contact my staff.

Very truly yours,



R. B. Starkey, Jr.
General Manager

K. B. Robinson SEG Plant

FG/bs

cc: Richard C. DeYoung (30)
R. A. Hartfield (3)