CP&L

Carolina Power & Light Company

H. B. ROBINSON STEAM ELECTRIC PLANT
Post Office Box 790
Hartsville, South Carolina 29550

FEB 29 1984

Robinson File No: 13510E Serial: RSEP/84-169

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

H. B. ROBINSON STEAM ELECTRIC PLANT
DOCKET NO. 50-261
LICENSE NO. DPR-23
NRC IE INSPECTION REPORT IER-83-26

Dear Mr. O'Reilly:

Carolina Power and Light Company's (CP&L) January 31, 1984, letter concerning Violation B of the subject report stated that this supplemental response would be provided by February 29, 1984. The violation related to a Plant shutdown on September 5, 1983, due to primary to secondary leakage and concerned a failure to plug two steam generator tubes during a May Steam Generator Inspection. A review of the eddy current tapes from that inspection indicated that the two tubes should have been plugged. Immediate corrective action consisted of shutting down the Plant followed by inspecting and plugging the affected tubes. A subsequent review of the remainder of the May inspection tapes indicated additional tubes should have been plugged in May. This additional information resulted in another Plant shutdown on November 2, 1983.

No single item could be identified as the root cause of the problems experienced in identifying tubes which needed plugging. CP&L has concluded that a combination of the following items caused the problems.

1. The large number of data generated from a 100% inspection program and the pressures of reviewing data on a critical path.

2. Long hours worked by the analysts (12 hour shifts) and the complexity of eddy current signals resulting from such factors as sludge piles, copper, and other signal interfering aspects of the steam generators.

3. The use of equipment and analytical methods which made it cumbersome for the analysts to use signals other than single frequency signals during the analytical process. Multi-frequency mixing was not used to cancel out complex interfering signals. As a result, signals which would have indicated degradation above the plugging limit were not analyzed in some cases.

To correct these causes, the following actions and changes were implemented during the November, 1983 Steam Generator Inspection Outage.

1. The analysts were limited to eight-hour shifts.

2. Equipment was used which was capable of computerized video graphics which has the flexibility of conveniently presenting the data to the analysts in various forms including the use of multi-frequency signals.

3. An independent review was made of all tapes following the original analysis.

CP&L considered implementing these corrective actions for any 100% steam generator tube inspection performed on the old steam generators. However, a January 26, 1983 Steam Generator Outage revealed the need to replace the old steam generators.

Since the old steam generators are to be replaced and the new steam generators will result in completely different inspection scopes and conditions, the corrective actions above are believed not appropriate anymore. However, CP&L's experiences with the old steam generators will definitely be factored into the inspection programs and techniques for the new steam generators. Therefore, no further corrective action is believed necessary at this time.

If you have any questions concerning this response, please contact me or my staff.

Very truly yours,

R. E. Morgan
General Manager
H. B. Robinson SEG Plant

CLW/ac

cc: R. C. DeYoung