CP&L

Carolina Power & Light Company

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United States Nuclear Regulatory Commission
Washington, DC 20555

Gentlemen:

In reference to your letter of March 12, 1987, referring to RII: 50-400/86-93-01, the attached is Carolina Power & Light Company's reply to the violation identified in Enclosure 1.

It is considered that the corrective actions taken are satisfactory for resolution of the item.

Thank you for your consideration in this matter.

Very truly yours,

R. A. Warden
Vice President
Harris Nuclear Project

RAW/sdg

Attachment

cc: Messrs. B. C. Buckley (NRC)
G. Maxwell (NRC-SHNPP)
Dr. J. Nelson Grace (NRC)

8704140490
4pp.

MEM/HO-8703830/PAGE 1/OS1

Attachment to CP&L Letter of Response to NRC Report RII:
50-400/86-93-01

Reported Violation:

Technical Specification 6.8.1, states that written procedures shall be established, implemented, and maintained covering activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

Appendix A of Regulatory Guide 1.33, Revision 2, February 1978 recommended that the authorities and responsibilities for safe operation and shutdown be governed by written Administrative Procedures. Operations Management Manual (OMM) 001, Operations - Conduct of Operations, states that plant equipment shall be operated in accordance with written approved procedures.

Contrary to the above, the licensee failed to properly review Maintenance Surveillance Test (MST) I0332, Revision 0, Reactor Vessel Level Monitoring System Transmitter Calibration, and the clearance request as required by Administrative Procedure AP-20, Revision 1, Clearance Procedure. Failure to properly conduct this review resulted in isolation and depressurization of RCS pressure transmitter 1-PT-402 and subsequent operator actions caused several challenges to the RCS pressure relief valves.

This is a Severity Level IV violation (Supplement I).

Denial or Admission and Reason for the Violation:

The violation is admitted with the following clarification. The cause of the event was personnel error and a procedural deficiency. The Reported Violation cites a failure to properly review MST-I0332 and the clearance request as required by procedure AP-20. There was no clearance request involved in this incident. The surveillance test procedure provides the administrative controls to be applied during surveillance testing and therefore clearances per AP-20 are not applicable. It is considered that the cause of the violation is attributed to the inadequate guidance provided to the operator in MST I0332.

The plant was in Mode 5 conducting fill and vent operations in preparation for running reactor coolant pumps. At approximately 1700 on December 3, 1986, procedure MST-I0322 for calibration of RVLIS level instruments was requested for start, including the closing of isolation valves 1RC-980 through 1RC-983. The procedure prerequisite data sheet provided with the procedure indicated to the Shift Foreman that only level instruments would be affected. No mention was made of RCS pressure transmitters PT-402 and PT-403 which were also isolated by the above valves. After the isolation valves were closed, apparently some leakage occurred because main control board (MCB) pressure indicators PI-402.1, PI-403.1 and PI-402.A appeared to be tracking RCS pressure up to the time of the incident. RCS wide range pressure transmitters PT-440 and PT-441 remained unaffected by this MST.

On the next shift, at about 2300, RCS pressure was being increased from 70 psig to 325-350 psig with the plant solid as required by procedure. Unaware that these pressure transmitters were isolated, PI-402 was selected for trending on the plant computer. The letdown pressure control valve, PCV-145, is used to maintain RCS pressure in this condition and had been noted by the operators to be operating erratically at times. Pressure stabilized at 344 psig at 2310 with PCV-145 in automatic. Around 2315, the wide range pressure indicator PI-402.1, the narrow range pressure indicator PI-402.A, the CRT trend plot of PI-402, plus the PI-402 narrow range recorder indicated rapid drop in pressure to about 60 psig, which was attributed to depressurizing the sensing line for RVLIS. The operator noted that letdown flow was high and attributed the drop in pressure to erratic PCV-145 operation, i.e., letting down too much flow.

Although there were several other indications of RCS pressure and letdown pressure, the control room personnel concentrated on the trend plot from the computer and the narrow range indicator for PT-402. They did not check all available indication. In order to restore pressure, the operator attempted to increase pressure by closing PCV-145. At 2320, RCS pressure started to increase about 40 psig/min. At 2322-30 PORV-445A opened at the low temperature - low pressure setpoint of 390 psig.

The operator observed the PORV cycle and noted various annunciator alarms such as ALB-9 (Pressurizer PORV 445A Inst. Air/N_2 Accum.) and ALB-10 (High RCS pressure at Low Temperature). Looking at other indicators it was then realized that PI-402.1, PI-402.A, and PI-403.1 were incorrect. The operator then shifted to PI-440 and PI-441 for indication. PCV-145 was adjusted to lower RCS pressure to less than 100 psig.

Corrective Steps Taken and Results Achieved:

Post analysis shows that RCS pressure reached 392.1 psig for an RCS temperature of 84°F. This was below the setpoint of the backup PORV at 400 psig. The subsequent Engineering Evaluation showed that the limiting pressure for this condition was 1750 psig, using the draft Appendix XX to ASME Section XI technique. Thus RCS pressure only reached 22.4 percent of its limit and thus the event was evaluated as not significant.

Corrective Steps Taken to Avoid Further Noncompliance:

1. Maintenance Surveillance Tests are being reviewed to ensure adequate guidance is given to operators on the impact of running the procedure. The review ensures that equipment is adequately identified. This review was made a prerequisite for the next performance of each MST following implementation of this program. This review has been completed for MST's which have not yet been baselined. As of April 6, 1987, 237 of the total 465 MST's have been reviewed.

2. Shift Note No. OP-40-86 was issued on December 4, 1986 to ensure instrumentation affected by tests are identified in a manner recognized by operators. The Shift Note requires that when permission is given to start a Surveillance Test that affects control board indication, the Control Operator will mark the Surveillance Test number on a white sticker and place it immediately above the indicator and remove the sticker when indication is no longer affected by the Surveillance Test.

Date When Full Compliance Will Be Achieved:

Action 2 was completed on December 4, 1986. Action 1 is an ongoing effort which was initiated immediately after the event. The review of MST's will be completed by the end of the first refueling outage. This action will be completed by May 1, 1988.