



UNITED STATES
ATOMIC ENERGY COMMISSION
DIVISION OF COMPLIANCE
REGION II - SUITE 818
230 PEACHTREE STREET, NORTHWEST
ATLANTA, GEORGIA 30303

TELEPHONE: 526-4537

April 30, 1970

J. P. O'Reilly, Chief, Reactor Inspection and Enforcement Branch
Division of Compliance, Headquarters

INQUIRY MEMORANDUM - CAROLINA POWER AND LIGHT COMPANY (H. B. ROBINSON NO. 2),
LICENSE NO. CPPR-26, DOCKET NO. 50-261

Failure of Six-Inch Transition Piece Between Main Steam Line and Safety Valve

This memorandum contains supplemental information regarding the subject failure which occurred on April 28, 1970, and was reported to you in our Inquiry Memorandum dated April 29, 1970.

This supplemental information was provided by C. M. Upright, Reactor Inspector, who was at the site at the time of the incident and for the following two days.

The additional information is as follows:

1. Immediately prior to the incident, the primary system pressure was 2335 psig; the temperature was 533°F. Ten minutes after the incident the pressure dropped to a low of 1862 psig. One hour after the incident the temperature dropped to 320°F. (The cool down rate is normally limited to 100°F/hour.)
2. Before the incident, the pressurizer level was 70%. Immediately after the incident the level drained below the range of the level instrumentation. The pressurizer level remained out of sight for about 30 minutes.
3. Immediately after the incident the three main reactor coolant pumps were shut off and the charging pumps were started.
4. The primary system pressure was back to 1900-2000 psig about one hour after the incident.
5. The failure occurred in steam generator loop No. 3.
6. Immediately after the incident the blow down valves were opened at the bottom of steam generator No. 3.

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7. The transition piece which failed was designed by Ebasco and fabricated by B. F. Shaw Company.
8. The transition piece was given a 100% MT and RT examination prior to time of failure.
9. CP&L made a press release of the incident to the radio media at 7:00 p.m. on April 28, 1970. The release mentioned the fact that seven men were injured at the H. B. Robinson nuclear plant, that the accident involved a failure in a nonnuclear system similar in type to that found in a conventional steam plant and that no radioactive fuel was in the reactor at the time of the accident nor was there any nuclear material involved in the accident.

In that this incident has significant safety implications, I would strongly recommend that the circumstances associated with this incident be disseminated to the other Ebasco designed reactor facilities as they too may have safety valve transition pieces of similar design to that involved in the incident.



W. C. Seidle
Senior Reactor Inspector

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REG Files