



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA ST., N.W., SUITE 3100  
ATLANTA, GEORGIA 30303

Report No. 50-261/80-36

Licensee: Carolina Power and Light Company  
411 Fayetteville Street  
Raleigh, NC 27602

Facility Name: H. B. Robinson Unit 2

Docket No. 50-261

Licensee No. DPR-23

Inspection at Robinson Site near Hartsville, SC

Inspector: *A. K. Hardin*  
A. K. Hardin

1/14/81  
Date signed

Approved by: *P. J. Kellogg*  
P. J. Kellogg, Section Chief, RONS Branch

1/15/81  
Date Signed

SUMMARY

Inspection on November 4-7, 1980

Areas Inspected

This special, announced inspection involved 29 inspector-hours on site in the areas of TMI Action Plan Category "A" requirements and observation of operation.

Results

Of the two areas inspected, one item of noncompliance was found in one area (Failure to prepare an operating Procedure for use of the Subcooling Monitor, paragraph 6.a.1), and one deviation was found in one area (Failure to provide instruction for calculating subcooling margin using steam tables, paragraph 6.a.2).

## DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*R. B. Starkey, Jr., General Manager
- \*C. Wayne Crawford, Manager, Operations and Maintenance
- \*H. S. Zimmerman, Manager, Technical and Administrative
- \*J. Benjamin, Engineer
- W. J. Flanagan, Engineer
- F. L. Lowery, Operation Supervisor Unit 2

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on November 7, 1980 with those persons indicated in Paragraph 1 above. At the exit interview the licensee was informed that discrepancies discussed in the following paragraphs would be transmitted to IE Headquarters for further action. On November 17, 1980 the licensee was informed that an infraction, discussed in paragraph 6.a.(1), and a deviation discussed in paragraph 6.a.(2), would be cited. The licensee acknowledged that he understood the citations.

### 3. Licensee Action on Previous Inspection Findings

None Inspected.

### 4. Unresolved Items

There were no new unresolved items.

### 5. Areas Inspected

The major areas of this inspection was a review and evaluation of the status of TMI Lessons Learned category "A" items at the H. B. Robinson Unit 2 Plant. In addition to on site observations and discussions with licensee personnel, the inspector used the following references as the primary basis for the evaluation.

- a. Letter, Utley, CP&L, to Denton, NRR entitled "Lessons Learned Short Term Requirements" dated December 31, 1979.
- b. Letter, Utley, CP&L to Denton, NRR entitled "Lessons Learned Short Term Requirements" dated March 31, 1980.
- c. Letter, Schwencer, DOR, NRR to Jones, CP&L entitled, "Evaluation of Licensees Compliance With Category "A" Items of NRC Recommendations Resulting from TMI-2 Lessons Learned" dated April 18, 1980.

- d. Letter, Utley CP&L to Eisenhut NRR entitled "Implementation of Category "A" TMI Lessons Learned Items", dated July 22, 1980.

The above four references contain a description of the Category "A" TMI requirements, the licensee's statement on how the requirements were met and NRR's evaluation of the licensees' actions.

6. Review of Status of Category "A" TMI Requirements

- a. Task Action Plan (TAP) No. II.E.4.2, NUREG 0578 Number 2.1.3.b. "Instrumentation To Detect Inadequate Core Cooling."

(1) This TAP item required each PWR licensee to install a primary coolant saturation meter. Although a subcooling meter which meets the requirements of the Action Plan has been installed, the licensee has not prepared an operating procedure for the instrument. Failure to provide a procedure is contrary to Technical Specification 6.8 and is a Severity Level V violation (Supplement 1).

(2) The Task Action Plan on the Subcooling meter also required the licensee to have a back up procedure for use of steam tables to calculate subcooling margin. In a licensee letter to NRR dated December 31, 1979, CPL Serial No. GD-79-3306, the licensee stated "The use of steam tables are described in the Emergency Instructions for a reactor trip and reactor coolant system depressurization." The licensee's Emergency Instruction does not contain an adequate description or an adequate procedure for use of steam tables. This is a deviation.

- b. TAP No. I.A.I.1. NUREG 0578 No. 2.1.2.b Shift Technical Advisor" (STA's).

The licensee has six individuals assigned as STAs. The inspector reviewed STA Training programs and training records at the Licensee's Training Center and the licensees Administrative Procedures on STA (called Shift Engineer at Robinson 2) duties. The licensee has met the requirements necessary for this TAP.

- c. TAP No. I.A.I.2, NUREG No. 2.2.1.a "Shift Supervisor Responsibilities Specified".

The responsibilities and authority of the shift are adequately specified by the licensee in Volume I, Section 2, Item 2.1.11 of the Licensee's Administrative Procedures.

Some non-safety duties had been removed from the Shift Supervisor responsibilities as proposed in the TAP. The licensee stated they were also planning to separate the Unit 1 control room (a fossil unit) from the nuclear unit control room which would enhanced ability

ability of the operators to perform their duties. The inspector also reviewed a letter from CP&L Corporate emphasizing the role of the Shift Supervisor in conduct of safe operations. Noncompliance or deviations were not observed in this area.

- d. TAP No. I.C.2, NUREG 0578 No. 2.2.1.c "Shift Relief and Turnover Procedures"

The procedures for shift relief and turnover are contained in Administrative Instruction Volume I, Section 4. These procedures which are specific to the Unit 2 Shift Foreman, Unit 2 Control Operator and the Unit 2 Inside and Outside Auxiliary Operator are considered adequate.

- e. TAP No. I.C.4, NUREG 0578 No. 2.2.2.a "Control Room Access"

The licensee's Administrative Instruction Section 4, Item 4.1.13 was reviewed by the inspector. The instruction contains assignment of authority and responsibility for Control Room Access.

- f. TAP No. II.B.3, NUREG 0578 No. 2.1.8.a "Post Accident Sampling"

In the licensee's December 31, 1979 response to TAP II.B.3 the licensee stated their sampling equipment was such that they could not draw a sample of the Regulatory Guide 1.4 magnitude without overexposing the personnel who draw the samples. In the licensee's March 31, 1980 letter to NRR a commitment was made to provide procedures by April 15, 1980 to obtain and analyze an unpressurized reactor coolant sample within 24 hours without overexposing any individual, and within the same time frame procedures for obtaining and analyzing a containment atmosphere sample within one hour would be prepared. An inspector verified that the procedure committed to exist. CP-3 for liquid sampling and analyses and EI-16 for containment atmosphere sampling and CP 4432 for containment atmosphere analysis.

The licensee stated they are working on a sampling station which will permit meeting the requirements of the Task Action Plan. The licensee stated they expect to be able to meet the completion dates listed in NRR's letter to the licensee's dated September 5, 1980.

- g. TAP No. II.D.3, NUREG 0578 No. 2.1.3. "Valve Position Indication, Relief and Safety Valves"

The inspector verified that the Pressurizer Power Operated Relief Valves (PORV's) at Robinson have direct indication of position thru limit switches and are backed up by temperature and pressure reading downstream of the valves. The inspector verified that an acoustical monitoring system had been installed to sense flow through the safety relief valves. The control room instruments

for receiving the signals from the monitors were also inspected. At the time of the inspection difficulties were being experienced with two of the acoustical monitoring instruments. The licensee stated they were having difficulty adjusting the band pass filters. Although some problems on the system require solution, the system should provide the desired high alarm should a valve open at high pressure.

- h. TAP No. II.E.1.2, NUREG 0578 No. 2.1.7a and 2.1.7.b, "Auxiliary Feedwater Initiation and Flow"

The inspector reviewed the auxiliary feedwater flow instrumentation installed in the control room and discussed the system with the licensee. The auxiliary feedwater initiating signals, power for the initiating signals and circuits, and testability and control appear to meet the current requirements to date of the Task Action Plan.

- i. TAP NO. II.E.3.1, NUREG 0578 No. 2.1.1 "Emergency Power For Pressurizer Heaters"

The licensee has established through the Westinghouse owners group that 125 kw of pressurizer heaters would maintain a 1300 cubic foot pressurizer in natural circulation in hot shutdown. The licensee uses three banks of heaters which totals 150 kw for the emergency heater situation. Power circuits for the heaters in emergency situations, i.e. loss of offsite power and SI have been established.

- j. TAP No. II.E.4.2, NUREG 0578 No. 2.1.4 "Isolation Dependability"

During the NRR Review of the Licensee's status of compliance with TAP items, NRR concluded in their evaluation report (see item 5.c of this report) that the licensee would lock closed all manually operated nonessential containment isolation valves. The licensee does not lock closed all manually operated nonessential containment isolation valves. The licensee's position is, that they did not commit to locking the valves. See item 5.d of this report). At the exit interview the licensee was informed that the discrepancy would be transmitted to IE headquarters. Resolution of the discrepancy will be left as an open item (261/80-36-01).

- k. TAP No. III.A.1.2, NUREG 0578 No. 2.2.2.b "Upgrade Emergency Support Facilities"

This TAP required establishment of an interim technical support center. The licensee's commitments and action on this facility was reviewed. The interim technical support center, although minimal, meets the TAP requirements.

1. TAP No. III.A.1.2 NUREG 0578 No. 2.2.2.e "On Site Operational Support Center"

The provisions for an interim on site operational support center were reviewed. The provisions meet the requirements of the TAP.

- m. TAP No. III.D.1.1, NUREG 0578 No. 2.1.6.a "Primary Coolant Outside Containment"

The licensees program and recent activities in measuring and correcting leakage from systems carrying radioactive fluids outside containment meets the TAP requirements. The ongoing program for leak measurement and control is administered through the licensees periodic tests system and will be done annually.