



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

Report No. 50-261/80-39

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

Facility Name: H. B. Robinson

Docket No. 50-261

License No. DPR-23

Inspection at Robinson site near Hartsville, South Carolina

Inspectors:	<u><i>K. Butcher</i></u>	<u>3-18-81</u>
	for T. J. Donat.	Date Signed
	<u><i>K. Butcher</i></u>	<u>3-18-81</u>
	for S. Weise	Date Signed
Approved by:	<u><i>C. Julian</i></u>	<u>3/19/81</u>
	C. Julian, Acting Section Chief, RRPI Division	Date Signed

SUMMARY

Inspection on December 23-31, 1980

Areas Inspected

This routine, announced inspection involved 90 inspector-hours on site in the areas of followup on previous inspection findings and observation of plant operations.

Results

Of the two areas inspected, one item of noncompliance was found (Failure to perform an unreviewed safety question review, paragraph 5).

B105060/89

DETAILS

1. Persons Contacted:

Licensee Employees

- *R. Starkey, Plant Manager
- *R. Connally, Director of QA and Nuclear Safety
- *J. Curley, Engineering Supervisor
- *W. Crawford, Manager of Operations and Maintenance
- *S. Zimmerman, Manager of Technical and Administrative Services

Other licensee employees contacted included construction craftsmen, two technicians, six operators, three security force members, and six office personnel.

NRC Resident Inspector

- *S. Weise

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on December 31, 1980 with those persons indicated in Paragraph 1 above. The licensee acknowledged the items of noncompliance and stated that corrective actions to ensure that they would not be repeated had been initiated. See paragraph 5 for details.

3. Licensee Action on Previous Inspection Findings

Closed - Infraction 80-21-01 concerning inoperable pressure regulator PCV-1049 for the Volume Control Tank. The inspectors have confirmed that the valve has been placed in service and that plant procedure OP-35 was modified to add a precaution concerning insuring the operability of PCV-1027 and PCV-1049. This item is considered closed.

Closed - Infraction 80-21-03 concerning the need for procedures to ensure identification and correction of non-conforming safety-related conditions. The following procedures were reviewed:

- Maintenance Instruction 1
- Administrative instruction section 2 "Plant Personnel General Responsibilities"
- Temporary General Instruction - Memorandum to Operating Personnel, Adequate guidance and instruction is provided concerning the identification and reporting of nonconforming safety-related conditions.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Followup on Previous Inspection Findings

- a. Closed 78-BU-LA, Atypical Weld Material in Reactor Pressure Vessel Welds. The inspector reviewed on NRC internal letter from W. Reinmuth to C. E. Murphy which stated that there were no outstanding questions on the acceptability of the clad welding materials used at H. B. Robinson.
- b. Closed 79-BU-03, Longitudinal Weld Defects. The inspector reviewed the licensee's responses dated 4/13/79 and 9/22/80 which identified all potential locations within the plant where the subject piping could have been used. Also reviewed was the associated stress analyses which showed that for all potential locations the actual stress levels were less than 85% of design stress and therefore acceptable for use.
- c. Closed 79-BU-04 Incorrect Weights used for Velon Swing Check Valves. The inspector reviewed licensee responses GD-79-1145, dated 5/1/79; GD-79-1435, dated 6/1/79; and GD-79-2737 dated 10/30/79 which defined the scope of systems examined, i.e. all 150 PSIG, 1500 psig and 2500 psig piping systems. The documentations showed which valves were found to have had incorrect weight used in the initial analysis, and what structural restraint changes were needed based on a reanalysis.
- d. Closed IEB 78-14, Deterioration of BUNA-N components in ASCO Solenoid Valves - This bulletin was only applicable to BWR plants and not H. B. Robinson.
- e. Closed 79-CI-24, Proper Installation and Calibration of Core Spray Pipe Break Detection Equipment on BWR's - Not applicable to H. B. Robinson.
- f. Closed 79-BU-25, Failure of Westinghouse BFD Relays in Safety Related Equipment. The inspector reviewed the licensee's response dated December 20, 1979; their response to IE Circular 76-02 dated October 20, 1978 and their Licensee Event Reports 78-29 and 80-27 as well as Westinghouse's letter CPL-80-563 dated (12/3/80). This bulletin is closed based on the fact that the licensee initially identified the problem, worked with the NSSS vendor to develop the final solution and has successfully implemented the solution in this bulletin.
- g. Closed 80-BU-09, Hydromotor Actuated Deficiencies. The licensee in his letter RSEP/80-829 dated June 10, 1980 stated that no Hydromotor Actuators, manufactured by ITT General Controls, were used or were planned on being used at H. B. Robinson Unit 2. Therefore this item is closed.

- h. Closed Inspector Followup Item 79-30-03 concerning tests of both diesel generators during the 1980 refueling outages for IE Bulletin 79-23. The inspector reviewed the completed special procedure to perform a full rated load test on the diesel generators for twenty-four hours as committed to in CP&L letter GD-79-2664 dated October 25, 1979. The inspector reviewed the completed test and considers the item closed.
- i. Open Inspector Followup Item 80-21-02 concerning the licensee's response to IE Bulletin 80-05 on the collapse of low pressure tanks. The inspector reviewed the licensee's implementation of low pressure tank protection committed to in his supplemental response to IE Bulletin 80-05. This included verification of:
- (1) Installation of the vent header low pressure alarm.
 - (2) Sensing line modifications for valves PCV-1027 and 1049.
 - (3) Vent and drain valve installed for PCV-1027 and PCV-1049 sensing lines.

The inspector found that with the exception of the following items, all licensee commitments have been met:

- (1) OP-33A's, Valve lineup sheets updated to reflect the valve additions, have not been distributed.
- (2) The low pressure alarm for the vent header is set at ± 0.5 Psig whereas drawing 5379-801, Rev. 4, states that external design pressure is atmospheric.
- (3) The supplemental response appears to assume that at least 3 psig is supplied to PCV-1027 from the on service a Waste Gas Decay Tanks (WGDT's). However the operating procedures do not address at what pressure another WGDT should be placed in service.
- (4) The CVCS Precautions, Limitations, and Setpoints document (PLS-3) does not reflect the new low pressure alarm.
- (5) Paragraph 86 of the licensee's operating notes provides guidance on the draining of sense lines for PCV-1027 and PCV-1049 in the event a hold-up tank is overfilled. This same guidance should also be in the system's operating procedure or PLS document.

The item, 80-21-02, will remain open until these items have been resolved.

- j. Closed - Inspector Followup Item-80-21-05 concerning incorporating into plant housekeeping procedures instructions on identifying and reporting nonconformance conditions on safety-related equipment. Since the

licensee has already incorporated these instructions in his maintenance, administrative, and temporary general instructions, this item is considered adequately covered and the item closed.

- k. Closed IE Bulletin 79-18 concerning audibility Problems Encountered on Evacuation of Personnel from High Noise Areas. The inspector reviewed the licensee's response which identified the Auxiliary Feedwater Pump Room and three fan rooms as areas in which the Evacuation alarm was not audible. The inspector also reviewed the licensee memo dated March 27, 1980 documenting that speakers had been added and that the Evacuation Alarm could be heard in all portions of the plant. The inspectors inspected the four speakers identified as having been added per Modification Package M-498-0. The inspectors found that three of the four speakers were not functioning. Specifically:

- (1) One of the two wires for the speaker in the auxiliary Feedwater pump room was not connected.
- (2) The speakers in Fan room HVS-1 and in Fan room HVS-5/HVS-6 were connected but did not operate.

Subsequent investigation by the licensee determined that the speaker in Fan room HVS-5/HVS-6 had the permanent magnet portion of the speaker removed while the speaker in Fan room HVS-1 was inoperative. The disconnect of the speaker in the auxiliary feedwater pump room was not authorized and all actions probably occurred during the recently completed outage. The inspector is leaving as a followup item the question of what type of periodic surveillance program testing was done to ensure operability of these speakers (80-39-01) but is closing the original bulletin.

- l. Open Item 79-11-04 concerned the adequacy of Natural Circulation cooldown procedures and compatibility of Operating Procedures when referenced by the plant's Emergency Instructions. The inspector reviewed the following procedures;

- EI-1, Incident Involving RCS Depressurization.
- EI-4, Loss of RC Flow.
- EI-7, Station Blackout Operation.
- EI-14, Reactor Trip (A) and Turbine Trip (B).
- GP-5, Normal Plant Shutdown From Power Operation to Hot Standby.
- GP-5a, Plant Temperature and Pressure control using Natural Circulation.
- GP-6, Plant Cooldown from Hot Standby to cold Shutdown Condition.

In none of the above listed procedures is any sort of linkage provided to the operators to guide them to the Natural Circulation procedure, GP-5a. The inspector contacted four other Westinghouse facilities and all had procedures for accident mitigation which guided the operator

step by step into the Natural Circulation procedure. When presented to the licensee, the plant manager agreed that the EI's needed to be modified to direct the operators to GP-5 in the event forced circulation was lost. The inspector stated he intended to list this as an Inspector Followup Item (80-39-02).

6. Independent Inspection Effort.

The inspectors noted that the Turbine Runback on a dropped control rod feature had been defeated in the control room. Subsequent investigation revealed that the licensee had defeated this protective function from December 12 through December 22, 1980. Also the licensee had failed to perform a safety analysis of the consequence of defeating this protective function as required by 10 CFR 50.59.

When this was brought to the licensee's attention they reinstated the protective feature and had a safety analysis performed. The analysis used as a basis for acceptability the power range negative flux rate trip (5% in 5 sec) and the technical specification basis 3.10 for a misaligned control rod, "complete rod misalignment (control rod 12 feet out of alignment with its bank) does not result in exceeding core safety limits in steady state operation at rated power...". Further discussions between the licensee and the inspectors revealed that the licensee had a fuel vendor report showing that no thermal limits would be exceeded with one control rod completely misaligned and that the appearance of rod bottom bistable initiated turbine runbacks usually considered with startup following an outage in which maintenance was done on the reactor vessel head. The licensee felt this could be related to connectors realigning themselves. The inspectors noted that if this had been a persistent problem as was described, that a safety analysis should have been done earlier and assistance obtained to resolve the problem, and that the negation of this safety-related protective function without performing a 10 CFR 50.59 review was a violation (80-39-03).