



UNITED STATES  
 NUCLEAR REGULATORY COMMISSION  
 REGION II  
 101 MARIETTA STREET, N.W.  
 ATLANTA, GEORGIA 30323

Report No.: 50-261/85-28

Licensee: Carolina Power and Light Company  
 P. O. Box 1551  
 Raleigh, NC 27602

Docket No.: 50-261

License No. : DPR-23

Facility Name: H. B. Robinson

Inspection Conducted: September 11 - October 10, 1985

Inspectors:	<u>H. E. P. Krug</u>	<u>10 OCT 85</u>
	H. E. P. Krug, Senior Resident Inspector	Date Signed
	<u>H. C. Whitcomb, III</u>	<u>10 OCT 85</u>
	H. C. Whitcomb, III, Resident Inspector	Date Signed
Approved by:	<u>P. E. Fredrickson</u>	<u>10 OCT 85</u>
	P. E. Fredrickson, Section Chief	Date Signed
	for Division of Reactor Projects	

SUMMARY

Scope: This routine, announced inspection involved 244 resident inspector-hours on site in the areas of technical specification compliance, plant tour, operations performance, reportable occurrences, housekeeping, site security, surveillance activities, maintenance activities, quality assurance practices, radiation control activities, outstanding items review, IE Bulletin and IE Notice followup, organization and administration, independent inspection and enforcement action followup.

Results: Of the areas inspected, no violations or deviations were identified.

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## REPORT DETAILS

## 1. Licensee Employees

## Persons Contacted

R. Barnett, Maintenance Supervisor, Electrical  
G. Beatty, Manager, Robinson Nuclear Project Department  
J. Benjamin, Principal Engineer, Operations  
R. Chambers, Engineering Supervisor, Performance  
C. Crawford, Manager, Maintenance  
J. Curley, Manager, Technical Support  
W. Flanagan, Manager, Design Engineering  
W. Gainey, Maintenance Supervisor, Mechanical  
G. Honma, Senior Specialist, Regulatory Compliance  
F. Lowery, Manager, Operations  
R. Morgan, Plant General Manager  
D. Nelson, Operating Supervisor  
M. Page, Engineering Supervisor, Plant Systems  
R. Powell, Principal Specialist, Maintenance  
B. Rieck, Manager, Control and Administration  
R. Smith, Manager, Environmental and Radiation Control  
D. Stadler, Director, Regulatory Compliance  
J. Sturdavant, Technician, Regulatory Compliance  
C. Wright, Senior Specialist, Regulatory Compliance  
H. Young, Director, QA/QC

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

## 2. Exit Interview (30702, 30703)

The inspection scope and findings were summarized on October 10, 1985, with the plant general manager. The licensee acknowledged the findings without exception. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection period.

## 3. Licensee Action on Previous Enforcement Matters (92702)

This area was not inspected.

## 4. Plant Tour (71707, 62703, 71710)

The inspectors conducted plant tours periodically during the inspection interval to verify that monitoring equipment was recording as required, equipment was properly tagged, operations personnel were aware of plant conditions and maintenance activities, and plant housekeeping efforts were adequate. The inspectors determined that appropriate radiation controls

were properly established, excess equipment or material was stored properly, and combustible material was disposed of expeditiously. During tours the inspectors looked for the existence of unusual fluid leaks, piping vibrations, pipe hanger and seismic restraint abnormal settings, various valve and breaker positions, equipment clearance tags and component status, adequacy of fire fighting equipment, and instrument calibration dates. Some tours were conducted on backshifts. Plant housekeeping was observed to be outstanding.

The inspectors performed valve lineup verifications and system status checks on the following systems:

- a. Reactor Protection System
- b. Containment Spray System
- c. Safety Injection System
- d. Auxiliary Feedwater System
- e. Emergency Response Facility Information System (ERFIS) Computer

Within the areas inspected, no violations or deviations were identified.

5. Technical Specification Compliance (71707, 62703, 61726, 92704, 92705)

During this reporting interval, the inspectors verified compliance with selected limiting conditions for operation (LCO's) and reviewed results of certain surveillance and maintenance activities. These verifications were accomplished by direct observation of monitoring instrumentation, valve positions, switch positions, and review of completed logs and records.

Periodically during the inspection interval, the inspectors reviewed shift logs and operation records, including data sheets, instrument traces, and records of equipment malfunctions. This review included control room logs, maintenance work requests, auxiliary logs, operating orders, standing orders, jumper logs, and equipment tagout records. The inspectors routinely observed operator alertness and demeanor during plant tours. The inspectors conducted random off-hours inspections during the reporting interval to assure that operations and security remained at an acceptable level.

The inspectors conducted a review of licensee records and documentation to obtain the most current status of the remaining outstanding items required by the TMI Action Plan. The inspectors noted that licensee records were complete and well-organized and that the licensee was effectively tracking the remaining "action due" items. The inspectors verified that Technical Specifications (TS) revisions were issued which delineated specific additional requirements resulting from the TMI Action Plan.

Within the areas inspected, no violations or deviations were identified.

6. Plant Operations Review (71707, 62703, 61707, 61711) Periodically during the inspection interval, the inspectors reviewed shift logs and operations records, including data sheets, instrument traces, and records of equipment malfunctions. This review included control room logs, maintenance work

requests, auxiliary logs, operating orders, standing orders, jumper logs, and equipment tagout records. The inspectors routinely observed operator alertness and demeanor during plant tours. The inspectors conducted random off-hours inspections during the reporting interval to assure that operations and security remained at an acceptable level.

The inspectors periodically verified the reactor shutdown margin. The inspectors also periodically observed the reactor axial flux difference and compared the observed values with those required by the Technical Specifications (TS).

Within the areas inspected, no violations or deviations were identified.

7. Physical Protection (71707)

The inspectors verified by observation and interview during the reporting interval that measures taken to assure the physical protection of the facility met current requirements. Areas inspected included the organization of the security force, the establishment and maintenance of gates, doors and isolation zones in the proper condition, that access control and badging was proper, that search practices were appropriate, and that escorting and communications procedures were followed.

During the inspection period, the inspectors continued to monitor the progress and activities of the Security Task Force with respect to the HBR Security System Upgrade Project. The inspectors attended the Security Task Force meeting held on October 2, 1985. Modifications schedules were discussed in detail and the establishment of required action to accomplish the scheduled deadlines was defined by the licensee.

On October 3, 1985, the inspectors observed and participated in a Security Upgrade Training Course presented by the licensee Training Department. The training room was suitable; and the course content, training aids and instruction were excellent. The course attended completes the series for plant personnel during the initial stage. The course is being taped so that future training sessions will consist primarily of a video presentation.

Within the areas inspected, no violations or deviations were identified.

8. Monthly Surveillance Observation (61726)

During the reporting period, the inspectors observed portions of selected surveillance tests including all aspects of Maintenance Surveillance Test Procedure MST-016 (Revision 2) titled "Containment Pressure Protection Channel Testing (Biweekly)" on September 22, 1985. MST-016 is performed biweekly to satisfy the requirements of Technical Specifications (TS), Section 4.1, Table 4.1-1, Item 18.

The inspectors observed the performance of these surveillance activities of safety-related systems and components to ascertain that these activities were conducted in accordance with license requirements. The inspectors

determined that the surveillance test procedures conformed to Technical Specifications (TS) requirements, verified that Limiting Conditions for Operations (LCO's) were met and verified that the surveillance test was completed at the required frequency. The inspectors also verified that the required administrative approvals were obtained prior to initiating the test, that the testing was accomplished by qualified personnel in accordance with approved test procedure MST-016 (Revision 2) and that any required test instrumentation was properly calibrated. Upon completion of the testing, the inspectors observed that the recorded test data was accurate, complete and met TS requirements, and; independently verified that the systems were properly returned to service.

Within the areas inspected, no violations or deviations were identified.

9. Monthly Maintenance Observation (62703, 56700, 62700)

On September 22, 1985, the inspectors witnessed the execution of Maintenance Surveillance Test Procedure MST-003 (Revision 5) titled "T-Avg and Delta-T Protection Channel Testing". The performance of this maintenance surveillance test is required to determine the operability of the reactor overtemperature and overpower channels, Sets I, II, and III. These tests are performed to satisfy the requirements of Technical Specifications (TS), Section 4.1, Table 4.1-1, Item 4.

The inspectors observed the maintenance activities of these safety-related systems and components to ascertain that these activities were conducted in accordance with approved procedures, TS and appropriate industry codes and standards. The inspectors determined that these activities were not violating Limiting Conditions for Operations (LCO's) and that redundant components were operable. The inspectors also determined (1) that MST-003 (Revision 5) was adequate to control the testing and/or adjustment of the T-Avg and Delta-T Protection Channels, (2) that required administrative approvals and tagouts were obtained prior to work initiation, (3) that proper radiological controls, and appropriate ignition and fire prevention controls were implemented, and (4) that instrumentation and equipment used were properly calibrated and certified. The inspectors verified that these activities were accomplished by qualified personnel using approved procedures. The inspectors independently verified that equipment was properly tested before being returned to service.

Within the areas inspected, no violations or deviations were identified.

10. Operational Safety Verification (71707)

The inspectors observed licensee activities to ascertain that the facility was being operated safely and in conformance with regulatory requirements, and that the licensee management control system is effectively discharging its responsibilities for continued safe operation by direct observation of activities, tours of the facility, interviews and discussions with licensee management and personnel, independent verification of safety system status and limiting conditions for operation, and reviewing facility records.

The inspectors observed control room participation in a fire drill commencing at 0629 on September 26, 1985. The drill postulated a fire in the south cable vault associated with the postulated heavy smoking of the "B" motor generator set. Also postulated was failure of both the automatic and manual actuation mechanisms for the associated CO2 flooding system.

The inspectors observed and participated in a "table top" Emergency Preparedness (EP) Drill during 1:00 pm to 4:00 pm on September 20, 1985. The drill was intended to provide EP practice for principals and alternates for the various positions in the EP structure at the plant, some of which are filled by corporate personnel from Raleigh. The drill also provided preparation for the annual drill currently scheduled for October 22, 1985. This drill, the latest in the series, was executed smoothly, and a few minor problems which occurred were completely captured during the critique following the drill.

During 1:00 pm and 4:00 pm on October 1, 1985, the inspectors observed and participated in an emergency preparedness overview class covering the Emergency Response Organization. During the period October 1-3, 1985, this class was provided to all personnel identified as being a part of the emergency response organization; and observers included state and county representatives. The presentations, and the associated "Student Handout - Emergency Plan Overview Course," were excellent in every respect. The participants were provided copies of the student handout to keep for reference and review.

Within the areas inspected, no violations or deviations were identified.

11. Onsite Followup of Events and Subsequent Written Reports of Nonroutine Events at Power Reactor Facilities (92700, 90714, 93702)

For onsite followup of nonroutine events, the inspectors determined that the licensee had taken corrective action(s) as stated in written reports of the events and that these responses to the events were adequate and met regulatory requirements, license conditions, and commitments. During this reporting period, the inspectors reviewed the following LERs to verify that the report details met license requirements, identified the cause of the event, described appropriate corrective actions, adequately assessed the event, and addressed any generic implications. When licensee identified violations were noted, they were reviewed in accordance with the enforcement policy. The inspectors had no further comments.

LER

EVENT

85-017	Reactor Trip - Steam Flow Greater than Feed Flow Coincident with Low Level in "B" Steam Generator
85-018	One F(Z) S(Z) Channel Inoperable Without Performing Manual Scans

- 85-019            Power Increase Prior to Termination of Physics Testing
- 85-020            Reactor Trip Resulting From "C" Main Transformer "Fault Pressure Signal"

Within the areas inspected, no violations or deviations were identified.

12. Organization and Administration (36700)

The inspectors reviewed the on-site licensee organization to ascertain whether changes made to the licensee's onsite organization are in conformance with the requirements of the Technical Specifications (TS) by verifying that (1) the established organization is functioning as described in the TS, (2) personnel qualification levels are in conformance with applicable codes and standards, and (3) the lines of authority and responsibility are in conformance with TS and applicable codes and standards. The inspectors also reviewed appropriate licensee records to ascertain whether the licensee's use of overtime is in conformance with regulatory requirements and that any deviations from maximum overtime limits were authorized in accordance with TS and/or plant administrative procedures.

Comprehensive discussions of current safety related activities were conducted with plant management and technical personnel during this reporting period including, and in particular, Environmental and Radiation Controls, Quality Assurance, Regulatory Compliance and Onsite Nuclear Safety organizations. Topics discussed included licensee activities associated with plant operations activities; plant modifications, including the security system upgrade; the fire protection system; ongoing construction activities; and communications interfaces.

On October 2, 1985, the licensee announced personnel reassignments within the organization of the General Manager. The Director of Onsite Nuclear Safety was moved into the position of Manager of Technical Support; who was rotated into the position of Director of Regulatory Compliance; who is assigned to the position of Project Specialist-Operations. The licensee stated that these reassignments are part of the licensee on-going management development program.

Within the areas inspected, no violations or deviations were identified.

13. Onsite Review Committee (40700)

The inspectors reviewed certain activities of the plant nuclear safety committee (PNSC) to ascertain whether the onsite review functions were conducted in accordance with Technical Specifications (TS) and other regulatory requirements. The inspectors (1) attended the regular monthly PNSC meeting held on September 19, 1985 as non participants and observed the conduct of the meeting, (2) ascertained that provisions of the TS dealing with membership, review process, frequency, qualifications, etc., were satisfied, and (3) reviewed meeting minutes to confirm that decisions and

recommendations were accurately reflected in the minutes, and (4) followed up on previously identified PNSC activities to independently confirm that corrective actions were progressing satisfactorily.

The inspection emphasized the following items :

Plant modifications associated with the Emergency Response Facility Information System computer (ERFIS)

A review of followup activities associated with LER 16, 17, 18 and 19.

Modifications to the Plant Emergency Procedures.

Training and other preparations for the annual emergency drill currently scheduled for October 22, 1985.

Within the areas inspected, no violations or deviations were identified.

14. Plant Procedures (42700)

The inspectors reviewed portions of the established procedure program to ascertain whether overall plant procedures were in accordance with regulatory requirements, temporary procedures and procedure changes were made in accordance with Technical Specification (TS) requirements, and the technical adequacy of the reviewed procedures was consistent with desired actions and modes of operation. Procedures examined included general plant operating procedures, startup, operation and shutdown of safety-related system procedures, abnormal condition procedures, procedures for emergency and other significant events, maintenance procedures and administrative procedures.

Specifically, the following procedures were inspected in detail:

AOP-001 (Revision 0) titled "Malfunction of Reactor Control System"

OWP-015 (Revision 4) titled "Reactor Protection"

CP-005 (Revision 6) titled "Secondary Chemistry Corrective Action Program"

Within the areas inspected, no violations or deviations were identified.

15. Surveillance and Maintenance Procedures and Records (61700, 62700)

The inspectors reviewed sections of the established licensee surveillance program. Inspection criteria included whether the surveillance of safety-related systems and components is being conducted in accordance with approved procedures as required by the Technical Specifications (TS), inservice inspection (ISI) and inservice testing (IST) programs for pumps and valves, and NRR-approved fire protection/prevention program. The inspectors also examined the technical content of selected procedures to



verify that testing of related systems or components ensures compliance with the requirements specified in the TS or ISI program, and is consistent with the appropriate sections of the Updated Final Safety Analysis Report.

Specifically, the following procedures were reviewed in detail:

MST-003 (Revision 5) titled "T-Avg and Delta-T Protection Channel Testing"

MST-016 (Revision 2) titled "Containment Pressure Protection Channel Testing (Biweekly)"

Within the areas inspected, no violations or deviations were identified.