



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

Report No.: 50-261/85-21

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

Docket No.: 50-261

License No.: DPR-23

Facility Name: H. B. Robinson

Inspection Conducted: June 11 - July 10, 1985

Inspectors: *A. K. Hardin for*
 H. E. P. Krug, Senior Resident Inspector

7/22/85
 Date Signed

A. K. Hardin for
 H. C. Whitcomb, III, Resident Inspector

7/22/85
 Date Signed

Approved by: *P. E. Fredrickson*
 P. E. Fredrickson, Section Chief
 Division of Reactor Projects

7/22/85
 Date Signed

SUMMARY

Scope: This routine, announced inspection involved 334 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.

REPORT DETAILS

1. Licensee Employees Contacted

- R. Barnett, Maintenance Supervisor, Electrical
- G. Beatty, Manager, Robinson Nuclear Project Department
- *C. Crawford, Manager, Maintenance
- *J. Curley, Manager, Technical Support
- B. Flanagan, Engineering Supervisor - Nuclear
- *F. Lowery, Manager, Operations
- *R. Morgan, Plant General Manager
- B. Reick, Manager, Control and Administration
- *D. Stadler, Director, Regulatory Compliance
- J. Sturdavant, Technician, Regulatory Compliance
- *A. Wallace, Director, Onsite Nuclear Safety
- *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.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 10, 1985, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection findings. No written material was provided to the licensee by the resident inspectors during this report period. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection.

3. 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 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 excellent.

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

- a. Residual Heat Removal System
- b. Reactor Trip System
- c. Emergency Station Batteries
- d. Service Water System
- e. Emergency Diesel Generators

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

4. Technical Specification Compliance (71707, 62703, 61726)

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

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

5. Plant Operations Review (71707, 62703)

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.

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

6. 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 meetings on June 13 and 20, 1985. Modifications behind schedule were discussed in detail and the establishment of required action to meet the scheduled deadlines was defined.

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

7. Determination of Reactor Shutdown Margin (61707)

The inspectors reviewed the following current revisions to the licensee procedures for conformance to the Technical Specifications (TS), technical accuracy and completeness:

FMP-012 (Revision 3) titled "Manual Determination of Shutdown Margin Boron Concentration"

FMP-010 (Revision 1) titled "Manual Determination of Xenon and Samarium Worths"

The inspectors reviewed the shutdown margin calculation performed by licensee personnel on March 31, 1985. The calculation was performed and verified by qualified personnel using the CP&L Nuclear Computer Program titled EXSPAC (Version PNRO2011). The inspectors queried licensee personnel concerning the use and meaning of the various printout quantities. The inspectors also verified selected reactivity results printed out against the corresponding information provided by the graphs in the plant curve book. Agreement between the results was acceptable in every case.

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

8. Monthly Surveillance Observation (61726)

The inspectors witnessed the execution of the weekly operability test of the emergency diesels, as it was performed on the B emergency diesel generator on June 17, 1985. This test was conducted using Operations Surveillance Test Procedure OST-401 (Revision 4) titled "Emergency Diesels - Weekly." The test director used the correct and current procedure and was qualified to perform the test.

OST-401 is designed to verify the mechanical performance and operational readiness of the emergency diesels; and that the requirements of TS 4.6.1.1 and 4.6.1.4 are satisfied. TS 4.6.1.1 states:

"Manually-initiated start of the diesel generator, followed by manual synchronization with other power sources and assumption of load by the diesel generator up to the (2500 kw) nameplate rating. This test will be conducted monthly on each diesel generator. Normal plant operation will not be affected." TS 4.6.1.4 also states that the "Diesel generator electric loads shall not be increased beyond the long term rating of 2500 kw."

The inspectors observed that the proper administrative approvals were obtained and that the required precautions were observed. The inspectors noted that although the TS require that this test be performed on a monthly basis, the licensee performs the test weekly in accordance with vendor recommendations. As part of the test, the operator verified the operation

of the redundant solenoid valves on the air start system by isolating one of the solenoid valves on the B diesel prior to the engine start. The B diesel generator successfully completed the test requirements.

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

9. Independent Inspection Effort (92706)

A survey was performed by the U. S. Department of Energy (DOE) in cooperation with the NRC as part of the continuing nationwide research and environmental radiation monitoring program. An EG&G, Inc., crew from the firm's Washington, D.C., Aerial Measurements Operations Office conducted the survey from June 18-27, 1985. The inspectors toured the survey team's facilities to increase their familiarity with equipment similar to the radiological and environmental survey equipment which would be used in the event of a plant emergency.

The inspectors participated in a licensee training program designed to familiarize site personnel with the new emergency response facilities which have now been commissioned inside the new Technical Support Facility. The training was conducted with the actual room to be used post incident. Emphasis was placed on practical communication drills in which the students operated the new Rolm phone equipment. The training was excellent in every respect.

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

10. Organization and Administration (36700, 92706)

Discussions of current safety related activities were conducted with plant management and technical personnel during this reporting period including, and in particular, the Quality Assurance, Regulatory Compliance and Onsite Nuclear Safety organizations. Topics discussed included licensee activities associated with Service Water System repairs, plant modification activities including the security system upgrade, and communications interfaces.

Improvements to the Robinson Radiological Protection Program continue under strong management direction. As reported in Inspection Report 85-13, licensee letter RNP/85-522 dated March 7, 1985, distributed the latest licensee self evaluation against the INPO guidelines; and required appropriate supervisors to develop action plans addressing the recommendations by March 31, 1985. This licensee self evaluation was both comprehensive and specific.

Subsequently, INPO released the final draft of its Radiological Protection Program Guidelines and the licensee is modifying its program accordingly. This updated licensee self evaluation is expected to be completed by July 15, 1985. Implementation of the resulting action items is scheduled for completion by June, 1986.

Finally, the licensee recently completed its upgrade of access controls to the Radiation Control Area. Individuals are now assigned dedicated personnel dosimeters which are drawn and returned with each access. Administrative controls have been simplified resulting in more rapid access without weakening controls.

The inspectors also discussed with the licensee the new guidance for implementation of NRC plant-specific backfit policy in accordance with NRC Manual Chapter 0514, "NRC Program for Management of Plant-Specific Backfitting of Nuclear Power Plants."

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

11. Onsite Review Committee (40700)

The inspectors reviewed the activities of the Plant Nuclear Safety Committee (PNSC) to ascertain that 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 June 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; (3) reviewed meeting minutes to confirm that decisions and recommendations were accurately reflected in the minutes; and (4) followed up to independently confirm that recommended corrective actions were completed.

The inspection emphasized the following items :

a. Review of proposed changes to the Technical Specifications (TS)

The PNSC members reviewed several proposed TS changes which included changes to facility staff qualifications, environmental qualification, low temperature physics testing, main steam flow parameters, and radioactive effluent release reporting. As a result of the items considered by the PNSC, the proposed amendments were determined to present no significant hazards consideration and will be submitted to the NRC for final approval.

b. HBR2 Post Trip and Safeguards Review

The Onsite Nuclear Safety (ONS) organization provided a presentation and an assessment of the results of its HBR2 Post Trip/Safeguards Actuation Review study. The purpose of this study was to assess the adequacy of the post trip/safeguards actuation review program currently established on site. The assessment considered the adequacy of the associated procedures and the extent of root cause investigation and corrective actions provided by the plant. Also the scope of the plant event investigations was compared with resolution of issues as identified in the findings of NUREG-1000 and INPO Good Practice 84-029. Recommendations made by ONS were introduced at the meeting and will be

considered at a later date. The inspectors are reviewing the results and recommendations made by ONS.

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

12. Plant Procedures (42700)

The inspectors reviewed the established procedure program to ascertain whether (1) overall plant procedures are in accordance with regulatory requirements, (2) temporary procedures and procedure changes were made in accordance with Technical Specification (TS) requirements, and (3) the technical adequacy of the reviewed procedures is consistent with desired actions and modes of operation. Examples of typical procedures reviewed 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.

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

13. Surveillance Procedures and Records (61700)

The inspectors reviewed the established licensee surveillance program to ascertain 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 several procedures to verify that testing of related systems or components ensures compliance with the requirements specified in the TS or ISI program. Included in this review were the following:

OST-401 (Revision 4) titled "Emergency Diesels - Weekly"

OST-610 (Revision 6) titled "Unit 2 Portable Fire Extinguishers Fire Hose Stations and Houses (Monthly)"

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