



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report No.: 50-261/84-1S

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 Date: May 15-18, 1984

Inspection at H. B. Robinson site near Hartsville, South Carolina

Inspector: M. D. Hunt
M. D. Hunt

5/31/84
Date Signed

Approved by: T. E. Conlon
T. E. Conlon, Section Chief
Engineering Branch
Division of Reactor Safety

6/1/84
Date Signed

SUMMARY

Areas Inspected

This routine unannounced inspection involved 24 inspector-hours on site in the areas of Electrical Maintenance and General Housekeeping.

Results

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

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *R. E. Morgan, General Manger
- *H. J. Young, Director, QA/QC Robinson Nuclear Plant
- *A. R. Wallace, Director - Onsite Nuclear Safety
- *C. L. Wright, Senior Specialist - Reg. Compliance
- *J. C. Sturdavant, Technical - Reg. Compliance
- *F. M. Gilman, Project Specialist - Reg. Compliance
- *R. L. Barnett, Principal Specialist - Maintenance
- *B. H. Snipes, Senior Specialist - NLT and Administration
- *R. H. Chambers, Supervisor - I&C Maintenance

Other licensee employees contacted included eight technicians, two mechanics and six office personnel.

NRC Resident Inspector

S. P. Weise

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on May 18, 1984, with those persons indicated in paragraph 1 above. The licensee representative acknowledged an inspector followup items identified by the inspector, 50-261/84-18-01, Review the Requalification Program for I&C Technicians and Electricians (Paragraph 4a).

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Independent Inspection (92706)

a. Electrical Maintenance

The purpose of this inspection was to review the licensee's electrical maintenance program in various safety-related areas. This review included the examination of the following QA and preventive maintenance procedures prepared by the licensee.

1. QA Procedure 302, Electrical and Instrumentation Inspection defines the QC activities related to the electrical and instrumentation installation of safety-related, fire protection, radwaste and certain non Q materials and equipment.

2. QA Procedure 103, Indoctrination, Training Qualifications and Certification of QA/QC Personnel, sets forth the requirements for the training and qualifying QA/QC personnel.
3. Preventive Maintenance Procedure PM-008, Emergency Diesel Generator Inspection Number 2, covers inspection of the engine, heat exchangers and a certain amount of engine teardown but also includes inspection of the alternator/exciter collector rings, brushes and bearings. The coils and poles are checked for movement.
4. Maintenance Surveillance Test (MST) 902 Battery Test - Daily, involves a general examination of the station batteries A and B to verify that fluid levels, voltages and temperature are within the stated acceptance criteria.
5. MST 903 - Battery Test - Monthly, involves an individual cell voltage measurement, specific gravity measurement and temperature measurement for station batteries A and B. From these measurements the length of time on equalizing charge is determined. After the equalizing charge is completed, measurements are repeated to insure that all cells meet the stated acceptance criteria.

It was noted that the maintenance activities are audited by the QA/QC site organization but direct observation of activities is only required for certain activities as designated in the procedures. The completed documentation is reviewed by the foreman. The results are further reviewed by the QA/QC section when placed in the vault.

The inspector observed the performance of the initial portion of MST Procedure 903 Battery Test - Monthly. The "A" station battery was selected for monthly testing. The voltage for each cell was measured. The average cell temperature was determined in order to calculate the low initial specific gravity (SG) for the battery. Actual SG measurements indicated that an equalizing charge was required. The equalizing charge was placed on the battery with the length of charging time calculated to be 36 hours. While the battery was not removed from service, the SRO was informed that the test was to be conducted and informed again when the equalizing charge was started. There were no QA/QC observation requirements in this test procedure. The personnel performing the test were well versed in the performance of this procedure and knowledgeable in the maintenance requirements for batteries. The calibration of the test digital voltmeters and the battery charger voltmeters were found to be current. Every effort was made to insure cleanliness in the battery room during the conduct of the test.

b. Electrical Maintenance Records

The inspector selected eight completed maintenance work requests (MWR) involving the testing, repair and preventive maintenance of the reactor trip breakers (DB-50). The following MWR Nos. AF-1, DR-6, DL-6 DM-6, FQ6, CG6, NA-5, and NB-5 involved replacement of undervoltage (UV) trip devices, performance inspections per service letters and bulletins, replacement of secondary contacts, and adjustment of the UV devices. Additionally, one of the listed MWRs directed that a reactor trip breaker be replaced with the redundant train bypass breaker until maintenance and testing of the original trip breaker was complete.

The records indicated that proper reviews by the supervisory personnel and the QA/QC section was accomplished. The completed work records are stored on microfilm and can be located readily through a computer program that uses word association as the controlling identifier.

The inspector selected several personnel who had performed work under the listed MWRs for review of qualifications. In each case it was found that the person was qualified at the time the work was performed. However, it was noted that the qualification records indicated that requalification of these personnel should have been accomplished on a two year cycle and was approximately 45 days late in being completed. Discussion with the responsible supervisory personnel revealed that the recertification process had been started. A review of Training Instruction (TI) 101, Replacement Training for I&C Technicians and Electricians, stated that requalification shall be accomplished every two years but states further that the two years is a guideline.

The licensee has a program to train I&C technicians and electricians who do not meet the minimum qualification requirements of ANSI Standard N18.1-1971 and any additional requirements listed under NUREG 0737 item II.B.4. The I&C foreman is responsible to the maintenance supervisor to implement the retraining using two years as the guideline. The requalification involves oral examination and judgment on the part of the foreman as to what retraining is required. A signoff sheet with approximately 22 areas is used.

While the training program for I&C technicians and electricians appears to be a satisfactory program, a further review of the control of requalification of personnel will be performed. This item will be identified as an Inspector Followup Item 50-261/84-18-01, Review the Requalification Program for I&C Technicians and Electricians.

Within the areas examined no violations or deviations were identified.

5. Housekeeping

The plant appeared to be well maintained in the areas of housekeeping and cleanliness. It was noted that good housekeeping practices were stressed by means of posters on bulletin boards, procedures, and employee orientation literature. The unit is involved in a major outage with outside contractor personnel performing activities which could result in housekeeping problems. An ongoing housekeeping program was in progress and appeared to be effective in the areas examined by the inspector.

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