



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

Report Nos. 50-400/82-36 and 50-401/82-36

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

Facility Name: Shearon Harris

Docket Nos. 50-400 and 50-401

License Nos. CPPR-158 and CPPR-159

Inspection at the Shearon Harris site near Raleigh, North Carolina

Inspector: *G. F. Maxwell* *12/1/82*  
G. F. Maxwell Date Signed

Approved by: *C. W. Burger* *12/1/82*  
C. W. Burger, Section Chief, Division of Project and Resident Programs Date Signed

SUMMARY

Inspection on November 8-20, 1982

Areas Inspected

This routine, announced inspection involved 48 resident inspector-hours on site in the areas of welding (Unit 1), storage (Units 1 and 2), concrete (Units 1 and 2) and CP&L activities (Units 1 and 2).

Results

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

## DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*A. M. Lucas, Assistant Project General Manager
- \*M. Thompson, Senior Resident Engineer
- \*G. L. Forehand, Director QA/QC
- \*B. Seyler, Resident Engineer - Civil
- \*G. M. Simpson, Principal Construction Specialist
- \*M. D. Vernon, Superintendent QC
- \*W. O. Pridgen, Civil Engineer
- \*D. Whitehead, QA Supervisor
- \*H. L. Williams, Engineer, Civil
- \*E. McLean, Project Mechanical Engineer

#### Other Organizations

- \*J. J. Lenahan, USNRC RII Civil Inspector

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on November 19, 1982, with those persons indicated in paragraph 1 above.

### 3. Licensee Action on Previous Inspection Findings

Not inspected.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. Welding - Unit 1 (50090C, 51063C and 55083C)

- a. The inspector evaluated in-process weld repair activities on Peden Steel shop fabricated seismic I electrical cable tray supports. The evaluation was associated with shop welds on support items identified by contract number 3953N; pieces numbered 84-H-1, 15-AP-47, 4-AP-3.1 and 4-AP-3.4. The inspector observed the presence of assigned CP&L inspection personnel who were verifying that the repair welds were being made by qualified welders in accordance with established guidelines and approved welding procedures. As a part of the evaluation the following were referred to for requirements: DDR-858, AWS D1.1 section 9.25, DCN-650-744, RFI QCW-011, procedure NDEP 605, welding procedure IA4 revision 3 and inspection procedure CQC-19.

- b. The inspector observed portions of the preparation and installation of RHR valve 2-RH-F511 SA-1 at elevation 237' in Unit 1 reactor auxiliary building. Part of the observation included evaluating the final visual weld inspection of one of the valve's field welds, numbered IRH-2-FW11, and an in-process liquid penetrant nondestructive examination (NDE) of the same field weld. The assigned CP&L NDE inspector performed the liquid penetrant testing in accordance with the required procedure (NDEP-201); the qualification documents for the NDE inspector were examined and found to be current.
- c. The inspector observed a final visual inspection of an RHR field weld located at about elevation 220' in the reactor auxiliary building. The assigned CP&L QC welding inspector examined the weld in accordance with the weld data report (WDR) and documents referenced on the WDR. The associated documentation for the weld, numbered 1-RH-24-FW-70A, was evaluated and found to indicate that the welder (assigned weld symbol B-7) had completed the weld. The qualification records for welder B-7 were evaluated and found to show that the welder is currently qualified for the welding processes which he had applied.

No violations or deviations were identified in the areas inspected.

#### 6. Storage and Other Areas Inspected - Units 1 and 2

- a. The inspector observed the stored conditions of Units 1 and 2 reactor vessels and Unit 2 steam generators. The storage conditions were evaluated to determine whether requirements are being met as follows:
  - (1) The vessels and steam generators were stored in accordance with the procedural requirements.
  - (2) The protective coatings on the vessels and steam generators were intact.
  - (3) The supports for the vessels and steam generators were adequate to prevent the entry of excessive dirt or water from accumulating in or around them.
  - (4) The supports for the vessels and steam generators were adequate to prevent shifting or collapse of the support structures.
- b. The inspector toured the outside piping laydown yard number 12. During the tour, the stored conditions of the piping and equipment were evaluated to determine whether requirements are being met as follows:
  - (1) Piping and equipment, in general, were stored off the ground to prevent entry of dirt into them or contamination from environmental conditions.

- (2) The storage areas were identified sufficiently to provide identity and location as required by those who may be seeking the location of certain pipe spool pieces or equipment.
  - (3) The drainage, in general, was acceptable in areas where the piping spool pieces and tanks were stored.
  - (4) Access was adequate for placement or removal of pipe spool pieces and equipment.
- c. While inspecting construction activities associated with the safety injection system, the inspector observed the uncrating, rigging and handling of a safety injection valve numbered 2SI-V574SB-1. The valve was being removed from the staging area east of Unit 2 auxiliary building and taken into Unit 1 auxiliary building at elevation 236'.

During the observations and evaluations, the following were referred to: PSAP section 1.4, construction procedures WP-106, AP-XIII-05, PGD-002 and AP-XIII-07.

No violations or deviations were identified in the areas inspected.

7. Concrete - Units 1 and 2 (92706B and 47053C)

- a. The inspector evaluated the storage conditions of aggregate and cement at the central batch plant. The attributes which were evaluated included the following:
- (1) The aggregate and sand stockpiles were clearly identified.
  - (2) Aggregates were adequately piled and located to meet specification requirements.
  - (3) The handling of aggregates is not creating an unacceptable amount of fines (small particles which may result from rough handling).
  - (4) Cement is being adequately protected from the elements and is not being stored an excessive amount of time at the job site, prior to usage.
  - (5) CP&L site records indicate that weekly inspections of the batch plant are routinely conducted by responsible CP&L personnel.
  - (6) CP&L site records indicate that daily aggregate tests are being conducted as required by CQC-13 and applicable ASTM requirements.

- b. The inspector observed portions of a concrete placement being made in Unit 1 fuel handling building (pour numbered 1FHXX28003). The observations included the following:
- (1) The condition of the concrete forms was inspected for cleanliness, level and tightness.
  - (2) Concrete placement activities were inspected as they pertained to delivery time, rate of rise, free fall and testing of the concrete at the point of delivery and consolidation.
  - (3) Construction inspection personnel were present to assure compliance with the specification and procedural requirements.
  - (4) Suitable weather protection was provided, as applicable.
  - (5) Surveillance of the pre-placement activities was conducted by responsible CP&L QA personnel.

As a result of the above observations, the inspector noted that the first concrete truck which arrived at the placement site had mix M-56 concrete which exceeded the specified slump requirements. The responsible CP&L inspection personnel documented the unsatisfactory concrete condition on nonconformance report numbered DR-C-1729.

In addition to the above, the following were referenced during the observations: PSAR section 1.4, 1.8; design specification CAR-SH-CH-6; construction procedures WP-01, WP-05, WP-15, CQA-6, TP-15, TP-17 and TP-02.

No violations or deviations were identified in the areas inspected.

#### 8. CP&L Activities - Units 1 and 2

- a. The inspector reviewed CP&L correspondence between CP&L and the Director of USNRC's Nuclear Reactor Regulation which indicated that CP&L has rescheduled completion of Harris Unit 1. The new schedule translates into an approximate six month delay in the fuel loading of Unit 1, from December 1984 to approximately June 1985.
- b. Some of the site CP&L system start-up staff has been located at the site for about one year. The staff has been working on such things as the start-up manual, test procedures, fire protection, maintenance and training.
- c. The inspector observed portions of the in-process examination methods being administered by NRC operations examiners. The examiners were giving written, oral and reactor plant simulator exams to two CP&L personnel seeking certifications as training center facility instructors for the Harris site operations staff. The examination of utility training center facility instructors is one of the many NRC requirements which is listed in the preliminary clarification of TMI action

plan requirements dated September 5, 1980 and covered in more detail by various NUREGs.

- d. During this reporting period there was change in two senior CP&L construction positions. One of the changes involved a reassignment of the Senior Resident Engineer to the position of Assistant Project General Manager, and the Director of Contracts and Services was reassigned as the Senior Resident Engineer.

No violations or deviations were identified in the areas inspected.