



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

Report Nos. 50-400/82-30 and 50-401/82-30

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: A. K. Harden for 9/27/82  
G. F. Maxwell Date Signed

Approved by: C. W. Burger 9/30/82  
C. W. Burger, Section Chief, Division of Project and Resident Programs Date Signed

SUMMARY

Inspection on August 20 - September 10, 1982

Areas Inspected

This routine, announced inspection involved 80 resident inspector-hours on site in the areas of follow-up on previously identified items, concrete, piping, personnel training and other activities.

Results

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

## DETAILS

### 1. Perscns Contacted

#### Licensee Employees

- \*E. S. Noell, Vice President of Transmission  
R. Parsons, Project General Manager
- \*G. L. Forehand, Director, QA/QC
- \*A. M. Lucas, Senior Resident Engineer
- \*G. M. Simpson, Principal Construction Specialist
- \*E. E. Willett, Resident Engineer Mechanical
- \*B. Seyler, Principal Civil Engineer
- \*D. C. Whitehead, QA Supervisor
- \*T. Cockerill, Principal Electrical Engineer
- \*L. T. King, Senior C. I. Engineer

#### Other Organizations

- \*W. D. Goodman, Daniel Construction Company, Project Manager
- \*J. Poythress, Daniel Construction Company, Civil Manager

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on September 10, 1982, with those persons indicated in paragraph 1 above.

### 3. Licensee Action on Previous Inspection Findings

- a. (Closed) Unresolved Item 400/81-21-02; "Fabrication deficiencies on main steam restraint structure." CP&L issued a nonconformance report to identify the misalignment conditions of the structural members on the PBI supplied steel (DDR numbered 696 was issued). The vendor (PBI) indicated that they would be more attentive, in the future, with specified tolerances.

Also, as a result of a subsequent violation (400/82-05-01) "Failure to identify and correct nonconforming conditions on Class 1E switchgear" and the corrective action taken by CP&L to preclude repetition; this item is closed.

- b. (Closed) Unresolved Items 400, 401/82-10-01; "Failure to place reinforced concrete over electrical duct runs." CP&L has made design changes, since the cancellation of Units 3 and 4, which will no longer require that a railroad cross over the electrical duct bank between manhole numbers 70 and 71. Therefore, CP&L is in compliance with design and FSAR requirements relative to the protection of the electrical duct run. This item is closed.

- c. (Closed) Violation 400/81-19-01; "Failure to document the use of substitute materials." The inspector reviewed the CP&L letter to Region II dated October 27, 1981 and the subsequent actions taken by CP&L to resolve material control. The apparent root cause of the violation was the variety of methods which could be utilized by craft personnel in requisitioning materials. The affected procedure (WP-110) has been revised to allow only one method of obtaining substitute materials for pipe hangers. Also, the inspector observed the removal of spacer plate parts numbered 11 on Bergen-Patterson pipe hanger A-2-236-1-CC-H-1242, revision 3/D. The parts were found to have a traceable heat number stamped on them; the purchase order reflected the material was traceable and was qualified to be used as substitute material. This item is closed.
- d. (Closed) Violation 400/81-25-02; "Failure to control special processes." The inspector evaluated the implementation of actions described in CP&L's letter to Region II dated March 12, 1982. The inspector verified that a design change notice (DCN) has been written to indicate the requirements for welds involving overlapping pieces of structural steel (DCN-650-744). Also CP&L welding inspection personnel have reinspected all of the class 1E cable tray supports which were installed prior to the date of the violation (December 8, 1981). The inspections resulted in identification of numerous conditions whereby the overlap conditions of the steel members did not meet design requirements. The inspector was informed on September 9, 1982, by CP&L supervisory personnel, that CP&L permanent waivers were written for each of the unsatisfactory conditions allowing them to be accepted as is. The inspector evaluated the design justification for one of the permanent waivers (PW-AS-1504) and found it to be acceptable. Further, the inspector was informed that the steel supplier (Peden Steel) was given DCN-650-744 and informed to comply with it or otherwise identify every instance that compliance is not achieved. This item is closed.

#### 4. Unresolved Items

Unresolved items were not identified during this inspection.

#### 5. Concrete - Unit 1

- a. The inspector observed portions of a concrete placement being made in Unit 1 fuel handling building (Pour Number 1FHSL336001).

The observations included the followings:

- (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.
- b. During a tour of the power block staging area the inspector observed isolated instances whereby reinforcing steel was not on dunnage. The inspector informed CP&L QA personnel of the concerns; as a result action was taken to place the steel back onto dunnage.

The following were referenced during the above observations: PSAR section 1.4, 1.8; design specification CAR-SH-CG-6; construction procedures WP-01, WP-05, WP-15, COA-6 and TP-17.

No violations or deviations were identified in the areas inspected.

#### 6. Piping - Unit 1

- a. The inspector observed the installed condition of three ASME Section II valves. During the observations the following were evaluated and observed relative to valves identified as 3-CC-V-200 SN1, 3-SW-V-14-SA1 and 2-CSV-249-SN1:
- (1) The valves had been previously inspected and accepted by the responsible CP&L QC mechanical inspection personnel.
  - (2) The valves were, in general, located in the areas where they will be permanently fastened.
  - (3) The valves were found to have the correct orientation, location and flow directions.
- b. As a result of the above observations the inspector, accompanied by a CP&L QC inspector, found one of the valve stems being utilized by craft personnel as a support for electrical welding machine wire leads. The accompanying CP&L QC inspector documented the concern on a nonconformance report number NCR-M-206. The inspector will further evaluate such practices during subsequent inspections.

The following were referenced during the above observations: PSAR section 1.4, FSAR section 1.8 and construction procedures WP-102, WP-128, CQC-2 and CQC-12, drawings numbered 2165-G-142, 2615-G-126 and 2165-G-100.

No violations or deviations were identified in the areas inspected.

## 7. Personnel Training - Unit 1

- a. On August 24, 1982 the inspector attended a training class which was administered by the site project mechanical engineering supervisory personnel. The class was provided some copies of a procedure which had been drafted for installing the reactor pressure vessel latch assemblies, head adapter plugs and instrument parts (WP-127). The class included personnel from: QA, Engineering, Westinghouse, Construction Inspection and the craft. During the presentation the procedure was reviewed (WP-127), questions were asked by the attendees and acceptable responses were provided.
- b. On August 25, 1982 the inspector observed a CP&L QC inspector receiving on the job training as a cadweld inspector. The portions which were observed included:
  - (1) The QC inspector in training prepared and conducted a horizontal cadweld on two pieces of number 18 reinforcing steel.
  - (2) The qualified QC cadweld inspector conducted visual inspections of the in-process preparation, the weld and a final visual inspection of the completed cadweld.

The following were referenced during the above observations: PSAR section 1.4, FSAR section 1.8 and construction procedures WP-15 and QAI 1.2.

No violations or deviations were identified in the areas inspected.

## 8. Other Activities - Units 1 and 2

- a. During this reporting period the inspector participated in portions of two other inspections conducted by personnel from Region II. One inspection was conducted during the week of August 30, 1982 and primarily involved welding activities. The second inspection was conducted during the week of September 6, 1982 and involved storage and electrical activities.
- b. The inspector observed in-process inspections of installed class 1E electrical cable trays. During the observation one of the trays, which had been released for inspection, was found not to be installed. The inspector observed that the condition was being documented by the responsible construction inspection (CI) personnel for further evaluation. The missing tray was identified on drawings 2166-G-311 as being located between points 2596 and 2606 at elevation 280'8" in Unit 1 reactor auxiliary building. The missing cable tray was documented on a nonconformance report numbered DR-E-033.



- c. The inspector attended an exit meeting which was held on August 27, 1982 between site CP&L management and CP&L Corporate QA audit personnel. The meeting was held to summarize the results of a site audit which was conducted during the week of August 23, 1982. The inspector was advised that the audit resulted in seven findings, one concern, and three comments. Also, that "Comments" will be the new method whereby CP&L QA audit personnel place on the permanent audit record, items about which they should further evaluate during subsequent audits.

The audit included evaluations of: pipe hanger installation, fire protection, and heating and ventilation systems.

The following were referenced during the above observations: PSAR section 1.4, FSAR sections 1.8, 7 and 8, construction procedures TP-42, TP-40, WP-203, WP-205 and CQC 2.

No violations or deviations were identified in the areas inspected.