



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA ST., N.W., SUITE 3100
 ATLANTA, GEORGIA 30303

Report Nos. 50-400/79-13, 50-401/79-13, 50-402/79-12 and 50-403/79-12

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

Facility Name: Shearon Harris Nuclear Power Plant

Docket Nos. 50-400, 50-401, 50-402 and 50-403

License Nos. CPPR-158, CPPR-159, CPPR-160 and CPPR-161

Inspection at Shearon Harris Site near Raleigh, North Carolina

Inspector: J. R. Harris *J. R. Harris for* 7/23/79
 Date Signed

Approved by: T. E. Conlon *T. E. Conlon* 7-23-79
 T. E. Conlon, RC&ES Branch Date Signed

SUMMARY

Inspection on July 9-11, 1979

Areas Inspected

This routine, unannounced inspection involved 24 inspector-hours onsite in the areas of structural concrete; site preparation; dams; and licensee action on previous inspection findings.

Results

Of the 4 areas inspected, no items of noncompliance or deviations were identified.

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DETAILS

1. Persons Contacted

Licensee Employees

- *R. M. Parsons, Site Manager
- *G. L. Forehand, Principal QA Specialist
- *A. M. Lucas, Resident Engineer
- *J. F. Nevill, Senior Engineer, Civil
- D. S. Canady, Geologist
- *N. J. Chiangi, Manager Engineering and Construction, QA
- E. L. Kelly, Senior Civil Specialist, QA
- *T. H. Wyllie, Manager of Nuclear Construction

Other Organizations

- I. Ciloglu, Geologist, Ebasco
- P. Shiebel, Geologist, Ebasco

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 11, 1979 with those persons indicated in Paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

- a. (Closed) Noncompliance (400/79-07-04, 401/79-07-04, 402/79-06-04 and 403/79-06-04): Concrete Truck Revolution Counter. Truck number 20 did not have a working revolution counter on pour number 1WPSL 23605 at 6:00 p.m. on April 11, 1979 as required by specification CAR-SH-CH-6. The inspector examined the licensee's response dated June 25, 1979 and implementation of the proposed corrected action. Revolutions showing on the counter are being recorded on batch tickets and new electronic digital counters are being installed on all concrete trucks.
- b. (Closed) Deviation (400/79-07-01, 401/79-07-01, 402/79-06-01, 403/79-06-01): Control of Moisture Content on Power Block Fill. The inspector examined the licensee's response dated June 18, 1979 and implementation of corrective action. Specification CAR-SH-CH-8 and Procedure TP-02 have been revised to control the moisture content of backfill at plus or minus 4 percent of optimum specified in the PSAR. Revisions and supporting data for revisions have been examined and approved by NRR and RII:IE. Appropriate changes will be reflected in the FSAR. This item is closed.



- c. (Open) Noncompliance (400/79-07-02, 401/79-07-02, 402/79-06-02 and 403/79-06-02): Failure to Place Embankment Core Fills At Specified Moisture Content. Impervious fill in the separating dike has been removed and replaced in accordance with revised procedures and specifications. Controlling procedures and specifications have been examined and approved by NRR and IE:RII. New impervious fills are being placed in accordance with the revised procedures and specifications. Previously placed core fills are still being evaluated by the licensee. This item remains open pending examination of the licensee's evaluation by NRR and IE:RII.

- d. (Open) Unresolved Item (400/79-07-03, 401/79-07-03, 402/79-06-03 and 403/79-06-03): Category I Piping Fill Support. The Licensee's response dated June 12, 1979 has been reviewed by NRR and IE:RII. Region II, in a later dated June 18, 1979 from J. P. O'Reilly to J. A. Jones, concurred with CP&L's schedule for resumption of fill around seismic category I pipe and adjacent electric conduit between coordinate N230 and the number 1 tank building. Emergency service water lines crossing fill between the tank building and rock will be on concrete extending to bed rock. Density tests will be made at the 5 foot, 7 foot and 10 foot levels and the foundation grade proof rolled at excavations into old yard fill for the nuclear service water line. Where the nuclear service water lines cross natural ground, the excavations will be controlled in accordance with CAR-SH-CH-8. The licensee is still evaluating powerblock fills and yard fills crossed by category I fuel lines and electrical ducts. This item remains open pending examination of the licensee's evaluation by NRR and IE:RII.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Independent Inspection

The inspector examined the following areas:

- a. Excavation and foundation preparation for Units 3 and 4
- b. Partial placement of concrete pour number 1FHIW 257025 in the fuel handling building
- c. Installation of reinforcing steel and preparation for concrete pours in units 1 and 2 containment buildings and RAB buildings.

6. Lakes Dams and Canals - Observation of Work and Work Activities, Units 1, 2, 3 and 4.

The inspector performed a followup inspection of subsurface preparation at the Main Dam and West Auxiliary Dam. Acceptance criteria examined by the inspector were:

- a. PSAR, Section 2 and Appendix 2E
- b. SER, Section 2.5
- c. CAR-SH-CH-4, Embankments and Dams, Dikes and Channels
- d. CAR-SH-CH-11, Ebasco specification, Drilling and Grouting
- e. Drawings CAR-2167-G6241 through CAR-2167-G-6245, Reservoir, Main Dam, Profile and Typical Sections
- f. Drawings CAR-2167-6270, 6272 and 6273, Reservoir, West Auxiliary Dam, General Plan, Profile and Typical

Observations included examination of excavations, geologic mapping and grouting, and placement of impervious fill in the Main Dam and West Auxiliary Dam core trenches. Areas examined are as follows:

- a. West Auxiliary Dam
 - (1) Results of consolidation grouting between stations 0+00 to 6+25 and stations 9+05 to 20+00
 - (2) Results of curtain grouting between stations 00 to 3+85 and stations 10+05 to 20+00
 - (3) Geologic mapping between stations -1+60 to 14+05 and results of excavations between stations 14+05 to -1+60. Observations included preliminary mapping on an extension of the plant fault across dam station 4+27. The licensee reported the fault to NRR in a letter from M. A. McDuffie to H. R. Denton, dated June 13, 1979.
 - (4) Placement of impervious fill in the separating dike
- b. Main Dam
 - (1) Results of consolidation grouting between stations 2+00 to 4+50 and 9+00 to station 12+50.
 - (2) Results of curtain grouting between stations 2+00 to 4+50.



(3) Results of excavation cleaning and mapping between stations 5+50 to 12+50.

(4) Hand compaction of impervious fill at station 4+00.

No deviations or items of noncompliance were identified.

11-11-71

