



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

APR 29 1980

Report Nos. 50-491/80-05, 50-492/80-05 and 50-493/80-05

Licensee: Duke Power Company  
 422 South Church Street  
 Charlotte, NC 28242

Facility Name: Cherokee Nuclear Station

Docket Nos. 50-491, 50-492, and 50-493

License Nos. CPPR-167, CPPR-168 and CPPR-169

Inspection at Cherokee site near Gaffney, South Carolina

Inspector: J. R. Harris 4/28/80  
 J. R. Harris Date Signed

Approved by: T. E. Conlon 4/29/80  
 T. E. Conlon, Section Chief, RCES Branch Date Signed

SUMMARY

Inspection on April 15-17, 1980

Areas Inspected

This routine, unannounced inspection involved 18 inspector-hours on site in the areas of structural concrete, nuclear service water dam, licensee action on previous inspection findings and construction status.

Results

Of the three areas inspected, no items of noncompliance or deviations were identified in two areas; one item of noncompliance was found in one area (Deficiency - Settlement monitoring program - paragraph 3).

## DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*J. T. Moore, Project Manager
- \*J. W. Willis, Project Senior QA Engineer
- \*W. H. Lindsay, Project Geotechnical Engineer
- \*K. W. Schmidt, QA Engineer
- D. Mason, Supervising Technician, Civil
- G. Williams, Layout Supervisor

Other licensee employees contacted included three civil technicians.

\*Attended exit interview.

### 2. Exit Interview

The inspection scope and findings were summarized on April 17, 1980 with those persons indicated in Paragraph 1 above.

### 3. Licensee Action on Previous Inspection Findings

- a. (Open) Unresolved Item 491/79-05-01, 492/79-05-01 and 493/79-05-01: Use Of Curing Compounds To Which Concrete Is To Be Bonded. Discussions with licensee representatives disclosed that use of a curing compound on construction joints has been discontinued. This item remains open pending further evaluation by NRC of the acceptability of the past use of a curing compound on construction joints.
- b. (Open) Noncompliance 491/79-10-01, 492/79-10-01, 493/79-10-01, "Placement Of NSW Dam Filter Materials At Densities Less Than Specified". The inspector examined results of cleaning of the blanket drain prior to testing and records of testing on areas of the blanket drain which had been uncovered, recompacted and retested. This item remains open pending completion of the licensee's corrective action.
- c. (Closed) Unresolved Item 491/80-03-01, 492/80-03-01 and 493/80-03-01, "Settlement Monitoring Program". Survey loop closure data and settlement monitoring on the unit one reactor and auxiliary building apparently were not being documented and performed as required. Examination of records and discussions with responsible licensee representatives disclosed that survey loop closure data was not available on surveys prior to March 10, 1980 and that settlement monitoring of the auxiliary building and reactor building were not performed as required. Procedure CKB-15, "Settlement Monitoring", paragraph IV.B states, "Settlement measurements shall be taken at each monument located on concrete structures within 24 hours after removal of concrete forms to establish

monument elevation". Records disclosed that settlement monitoring on the reactor and auxiliary building was not initiated until three months after removal of forms. This item is closed as unresolved item 491/80-03-01, 492/80-03-01 and 493/80-03-01 and upgraded to Deficiency number 491/80-05-01, 492/80-05-01 and 493/80-05-01 Settlement Monitoring.

Examination of records showed that the licensee has taken proper corrective action on the above items. Documentation forms have been revised to include survey loop closure data and settlement monitoring on the reactor and auxiliary building was performed on March and April 10, 1980. Procedure CKB-15 is being revised to clarify settlement monitoring requirements. In view of the above actions taken by the licensee no response is required to this item.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Independent Inspection

The inspector examined the following areas:

- a. Construction status.
- b. Soils and concrete laboratory and currentness of calibration of laboratory equipment.
- c. Results of concrete placement in the nuclear service water dam spillway.
- d. Records of remedial work on the nuclear service water dam.

No deviations or items of noncompliance were identified.

6. Containment (Structural Concrete II) - Observations of Work and Work Activities, Unit 1

The inspector observed placement preparation and control of concrete materials for radial wall pour numbers W-331, W-333, W-336 and shell wall pour number W-52 in the unit one reactor building.

Acceptance criteria examined by the inspector appear in the following documents:

- a. PSAR section 3.8.1.6.
- b. Specification number P81S-1109.00-00-0001, Specification For Concrete For Category I Structures.
- c. Specification number CKS-1162.00-00-001, Reinforcing Steel.

- d. M-2 Inspection of Design Concrete.
- e. Drawing numbers P81-1080-13 and P81-1081-19.

Forms were properly secured, leak tight and clean and rebar was properly placed, secured, free of concrete and excessive rust. Concrete materials were being adequately controlled.

No deviations or items of noncompliance were identified.