



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

Report Nos. 50-413/80-22 and 50-414/80-22

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

Facility Name: Catawba Nuclear Station, Units 1 and 2

Docket Nos. 50-413 and 50-414

License Nos. CPPR-116 and CPPR-117

Inspection at Catawba site near Lake Wylie, South Carolina

Inspector: C. R. McFarland 9-10-80
C. R. McFarland Date Signed

Approved by: J. C. Bryant 9/10/80
J. C. Bryant, Section Chief, RCES Branch Date Signed

SUMMARY

Inspection on August 19-22, 1980

Areas Inspected

This routine resident inspection involved 25 inspector-hours onsite for the review of QA procedures, responses to nonconforming items, unresolved items, inspector followup items, and IE Bulletins, and observing work related to the corrective action programs for these items.

Results

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

DETAILS

1. Persons Contacted

Licensee Employees

- *D. G. Beam, Project Manager
- *D. L. Freeze, Project Engineer
- *S. W. Dressler, Senior Construction Engineer
- *L. R. Davison, Senior QC Engineer
- *R. A. Morgan, Senior QA Engineer (QAE)
- *J. C. Shropshire, QAE Mechanical, Welding
- H. D. Mason, QAE Civil Electrical
- H. L. Atkins, QAE Mechanical
- C. L. Biggers, QA Technician, Civil
- D. A. Jenkins, QA Technician, Instrumentation
- D. H. Llewellyn, Construction Engineer, Welding

Other licensee employees contacted included various construction craftsmen, technicians and office personnel.

Other Organizations

Hartford Steam Boiler Inspection and Insurance Company

- *J. W. Kosko, Authorized Nuclear Inspector (ANI)
- C. F. Toegel, ANI

Bahnson Service Company

T. Payne, QC Engineer

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on August 22, 1980, with those persons indicated in Paragraph 1 above. No new items of noncompliance or unresolved items were identified in the areas inspected.

3. Licensee Action on Previous Inspection Findings

- a. (Closed) Deficiency 413/414/80-15-03, Failure to document QC welding surveillance. The inspector reviewed the corrective action program as stated in the licensee's response to Region II dated August 19, 1980. The inspector reviewed the applicable procedures M-4 and M-19, and training records. Discussions with responsible DPC personnel and a review of supporting documentation indicated that the QC inspectors observe the required parameters on a daily basis. The QC inspectors document the surveillance of welding parameters about once a week to assure that the requirements for the random inspection are met.

- b. (Closed) Unresolved Item 413/80-18-02, Verification of welding procedure parameters prior to welding. Gas flow gauges made of plastic have been procured and installed on the deficient inert arc welding equipment. It was observed by the inspector that they are being installed on all other inert arc welding sets used on safety related equipment. The welders, welding foremen and welding QC inspectors have been retrained in the need to observe the gas flow as specified in the applicable welding procedures.

4. Unresolved Items

There were no new unresolved items identified during this inspection.

5. Independent Inspection

The inspector toured the Unit 1 and Unit 2 facilities, observed work inside the reactor buildings, the auxiliary building and the control room, talked to various craft personnel, and discussed the construction status with the project engineer. The current fuel loading dates are August, 1983 for Unit 1 and February, 1985 for Unit 2.

6. IE Bulletins

(Closed) IEB 80-05, Vacuum Condition Resulting in Damage to Chemical Volume Control System (CVCS) Holdup Tanks. The inspector reviewed the DPC response to Region II dated June 9, 1980, and discussed the requirements of the bulletin with the DPC staff. The subject tanks at Catawba are designed to be protected against failure under vacuum conditions either by structural design or by venting.

7. Inspector Followup Items (IFI)

- a. (Closed) IFI 413/414/79-21-01, Concrete form deadlines and vibration practices. The inspector reviewed the corrective action taken to close nonconforming item (NCI) 6992 dated November 6, 1979, on pour 2W146 of the Unit 2 reactor building cranewall. The inspector observed the repaired concrete. The inspector also reviewed the training records dated January 4, 1980, and January 29, 1980, for concrete placement. The QA surveillance reports dated April 3, 1980, and June 20, 1980, for work related to concrete placement, honeycombing and consolidation were reviewed by the inspector.
- b. (Closed) IFI 413/414/79-21-02, Requirements for licensee reassembly of component mechanical joints. The inspector reviewed construction procedure (CP) CP-117, Bolt and Stud Torque Procedure, and QA procedure M-10, Process Control and Inspection of the Application of Torque or Tension to Bolts and Studs. M-10 has been revised to extend the scope to all QA condition mechanical equipment anchor conditions and flange conditions. The design engineering approved specifications (CNS) for the vendor procured items and the field engineering items are inspected per the procedure M-10 for mechanical equipment. QA procedures for

other types of equipment (i.e., structural, electrical, cable trays, piping and valves) also include requirements to verify the torquing of bolts and studs.

- c. (Closed) IFI 413/79-03-01, Licensee to clarify concrete expansion anchor installation procedures concerning load testing and gaps behind base plates. The inspector reviewed the current issues of the DPC QA procedures, CP's, and specifications and the Bahnson QC procedures identified in the original report and discussed the item with DPC and Bahnson personnel. Revision 3 dated October 4, 1979, of CNS 1196.02 has added Appendix A which includes a section on gap clearance, the acceptance criteria for gaps and the corrective actions that are permitted to be used to provide the correct gap. Load testing and/or torque checking has also been clarified in Revision 3, CP-115, Installation of Concrete Expansion Anchors interprets the requirements of CNS 1196.02 clearly. CP-115 is used for HVAC and piping supports. CP-301, Control of Electrical Cable Tray Hanger Inspections and Records, Revision 3 dated March 19, 1980, is used for electrical installations. The applicable Bahnson QC procedure QFP-9.002 and instruction QCI CNS-003 were reviewed.

Clear and adequate references to CP-115 requirements are included in the Bahnson inspection documents. The inspector reviewed the Bahnson inspection program previously as reported in report number 50-413/414/80-13.

- d. (Closed) IFI 413/79-03-02, Licensee to clarify inspection requirements for site fabricated supports. The inspector reviewed the current issues of the DPC procedures identified in the original report and discussed the item with DPC personnel. QA procedures M-9, Mechanical Equipment Inspection, and M-18, Inspection of Structural Steel Erection, now require configuration checks of installed equipment to be made and clearly documented. A back check of equipment installed prior to the original inspection has been made to verify that the equipment was installed according to the drawing requirements.

8. Licensee Identified Items (LII), 10 CFR 50.55(e)

- a. (Open) LII 413/414/80-22-01, Diesel Generator Heat Exchanger, Incorrect Segmental Baffling. DPC has provided Region II with an interim report dated March 7, 1980. The inspector reviewed the item with DPC personnel. DPC has accepted DeLaval's acceptance of the design change and the modifications to only the internals of the heat exchangers. The two modified heat exchangers are on hold in the warehouse. A design review by DPC design engineering is being performed. The review will include an analysis of a 24-hour test of a similar diesel generator and heat exchanger.
- b. (Open) LII 413/414/80-22-02, Chemical Volume Control System (CVCS) Centrifugal Charging Pumps. DPC has provided Region II with an interim report dated July 17, 1980, including a copy of the Westinghouse Electric Corporation 10 CFR Part 21 report to the NRC dated May 8, 1980. DPC is awaiting completion of the Westinghouse analysis and recommendations relative to the Catawba systems.