

## UNITED STATES NUCLEAR REGULATORY COMMISSION

#### REGION II 101 MARIETTA ST., N.W., SUITE 3100 ATLANTA, GEORGIA 30303

Report Nos. 50-413/79-22 and 50-414/79-22

Licensee: Duke Power Company

422 South Church Street

Charlotte, North Carolina 28242

Facility Name: Catawba Nuclear Station

Docket Nos. 50-413 and 50-414

License Nos. CPPR-116 and CPPR-117

Inspection at Catawba Nuclear Station near Rock Hill, South Carolina

Inspector: W. P. Ang

12-11-70

Date Signed

Approved by:

Herdt, Section Chief, RC&ES Branch

SUMMARY

Inspection on November 19-21, 1979

Areas Inspected

This routine, unannounced inspection involved 20 inspector-hours on ite in the areas of pipe support baseplate designs using concrete expansion anchor bolts; seismic analysis for as-built safety-related piping systems; and safety-related component mechanical joints.

Results

No items of noncompliance or deviations were identified.

#### DETAILS

### 1. Persons Contacted

Licensee Employees

\*D. G. Beam, Project Manager

\*D. L. Freeze, Project Engineer

\*R. A. Morgan, Senior QA Engineer

\*S. W. Dressler, Senior Construction Engineer

\*L. R. Davison, Senior QC Engineer

\*H. D. Mason, QA Engineer

\*J. C. Shropshire, QA Engineer

Other licensee employees contacted included four construction craftsmen and  ${\tt QC}$  inspectors.

\*Attended exit interview.

### 2. Exit Interview

The inspection scope and findings were summarized on November 21, 1979, with those persons indicated in Paragraph 1 above. Inspector followup item 50-413/79-21-02, Paragraph 3, requirements for licensee reassembly of component mechanical joints, was discussed.

# 3. Licensee Action on Previous Inspection Findings

Inspector follow-up Item 50-413, 414/79-21-02 (Open) An individual was concerned over the wide differences between vindor and Duke Power Company's mechanical installation inspection procedure requirements (i.e., torque requirements) for vendor supplied safety-relate' equipment. These concerns were further resolved into the following specific concern:

Torque requirements of construction procedure (CP) No. 392 conflicted with torque requirements of construction procedure No. 117. Specifically, torque values provided by a DeLaval Vendor representative and implemented by CP 392 conflicted with CP117. In addition the inspector noted that licensee records for the make-up of mechanical joints for the diesel generator lube oil piping were not generated. The licensee agreed to study the reported conflict of CP requirements and the recordkeeping requirements and take corrective action as may be required.

In addition, general concerns regarding the NRC inspection program, mechanical joint make-up requirements, and pump aligngment procedures were discussed with the individual. Pending licensee resolution of the items noted above, this inspector follow-up item shall remain open.

4. Unresolved Items

Unresolved items were not identified during this inspection.

 Pipe Support Base Plate Designs Using Concrete Expansion Anchor Bolts, Units 1 and 2

The licensee response to IE Bulletin 79-02 stated that concrete expansion anchors are inspected to assure proper installation. The following procedures provide the licensee's requirements for installation and inspection of concrete expansion anchors.

- a. QA Procedure M-52, Rev. 3 Concrete Expansion Anchor Installation Inspection
- Construction Procedure 115, Rev. 7 Installation of Concrete Expansion Anchors

The above noted procedures were reviewed for compliance with licensee commitments and NRC requirements. In addition, the baseplates and concrete expansion anchors for the following supports were inspected for compliance with licensee procedural requirements and IEB 79-02 requirements:

- a. 1-R-RN-148
- b. 1-R-KC-574
- c. 1-R-KC-565
- d. 1-A-WG-3036
- e. 1-A-WG-8424

The five supports noted above contained twenty concrete expansion anchors. One of the twenty did not have legible length markings. An ultrasonic test length check however, verified it to be the correct length. The licensee agreed to evaluate whether the above noted unacceptable length marking was an isolated case or was more widespread. Pending NRC reinspection, IEB 79-02 shall remain open. No items of noncompliance or deviations were identified.

6. Seismic Analysis for As-Built Safety-Related Piping Systems, Units 1 and 2

The licensee's response to IE Bulletin 79-14 stated that their current quality assurance procedures adequately provide coverage of IEB 79-14 concerns. The following procedure provides the licensee's requirements for inspection of as-built safety-related piping.

- a. QA Procedure M-8 Rev. 8 Piping System Installation Inspection
- b. QA Procedure M-15, Rev. 10 Installed Pipe Support Inspection
- Construction Procedure 385, Rev. 0 Support/Restraint Erection Tolerances

The above procedures were reviewed for compliance with licensee commitments and NRC requirements. The following items were noted and discussed with the licensee:

- a. The above noted procedures allow inspection prior to removal of temporary supports. Subsequent removal of the temporary supports could invalidate the inspection and desired pipe clearances may not be obtained.
- 'b. Inspections are allowed to be performed prior to installation of other items in the vicinity. Required clearances may not be maintained. A required walk-thru inspection may or may not identify this since the requirements for the walk-thru inspection are not clearly identified.
- c. No verification is made that valve weights quoted on vendor drawings are correct.

The licensee agreed to study the items noted above and to make procedural changes that may be considered necessary to assure that the as-built condition of the piping and supports are properly reflected on the seismic analysis.

The five supports noted on Paragraph 5 were also inspected for compliance with licensee commitments and NRC IEB 79-14 requirements. It was noted that a cable tray had been installed adjacent to support 1-R-RN-148 such that any required movement of the piping and the support in that direction may not be possible. The licensee agreed to evaluate the above noted condition.

Pending subsequent NRC inspection, IEB 79-14 shall remain open. No items of noncompliance or deviations were identified.