



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

Report Nos. 50-390/79-22 and 50-391/79-18

Licensee: Tennessee Valley Authority
500A Chestnut Street
Chattanooga, Tennessee 37401

Facility Name: Watts Bar Units 1 and 2

Docket Nos. 50-390 and 50-391

License Nos. CPPR-91 and CPPR-92

Inspection at Watts Bar Site near Spring City, Tennessee

Inspector: R. M. Compton 5/23/79
R. M. Compton Date Signed

Approved by: J. C. Bryant 5/23/79
J. C. Bryant, Section Chief, RCES Branch Date Signed

SUMMARY

Inspection on May 2-4, 1979

Areas Inspected

This special unannounced inspection involved 17 inspector hours onsite in the areas of concrete expansion anchors and safety related components.

Results

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

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DETAILS

1. Persons Contacted

Licensee Employees

- *T. B. Northern, Project Manager
- *J. M. Lamb, Mechanical Engineering Unit Supervisor
- *J. H. Perdue, Electrical Engineering Unit Supervisor
- *A. W. Rogers, Quality Assurance Unit Supervisor
- *J. A. Morgan, Mechanical Engineering Unit Assistant Supervisor
- G. K. Bonine, Mechanical Engineer
- K. Warren, Mechanical Engineer
- J. R. Vineyard, Electrical Engineer

Other licensee employees contacted included construction craftsmen, field engineers, QC inspectors and QA personnel.

NRC Resident Inspector

- *B. J. Cochran

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on May 4, 1979, with those persons indicated in Paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Concrete Expansion Anchors - Units 1 and 2

(Open) Licensee Identified Item 390/78-35-01, 391/78-27-01: Pipe hanger support plate bolts. Two basic types of deficient anchor installation have been identified: anchors sleeves and mounting bolts that had been cut such that they could carry no load (fake anchors); and anchor sleeves and mounting bolts that had been cut such that load capacity was reduced. Condition Adverse to Quality Report M-31 and NCR's 1344-1349, 1384-1391 and 1410 were examined for the types of conditions reported and the corrective actions taken. Approximately 300 hangers had been inspected, and 15 deficient anchor installations have been identified. The licensee determined that the faked bolts were the work of two specific installation crews, and all completed work identified to these crews has been inspected. These persons

are no longer employed at the site. Craftsmen have received additional training on proper anchor installation, and a visual inspection of at least one anchor per hanger is now being performed by field engineers. Hangers installed prior to identification of the problem are still being visually inspected. This item remains open pending evaluation of the licensee's final report and corrective actions.

Licensee actions concerning deficient anchor installations in electrical cable tray supports, reported per 10 CFR 50.55 (e) in March, 1978, were also examined. Condition Adverse to Quality Report E5, Design Information Request E-7, NCR's 1114R and 1158R and QA Audit WB-E-78-08 were examined for the conditions reported and the corrective actions taken. WBNP QCP 3.4, Revision 7, "Installation, Inspection and Documentation of Cable Tray Supports", was reviewed.

Discussions were held with responsible mechanical and electrical field engineers concerning retraining of craft personnel, reinspection of completed work, increased inspection frequency for new work, and their inspection responsibilities.

The inspector visually examined expansion anchor installations for pipe and cable tray supports on the 737, 757 and 772 elevations of the Auxiliary Building and the 708, 729 and 741 elevations of the Control Building.

No deviations or items of noncompliance were identified.

6. Licensee Identified Item (10 CFR 50.55(e))

(Open) Licensee Identified Item 390/79-22-01 and 391/79-18-01; Defective Red Head concrete anchors. TVA notified RII that ITT Phillips Company had recalled approximately 10,000 half inch self-drilling concrete expansion anchors that may have out-of-specification expansion plugs. Tests by TVA indicate that these anchors will not meet the vendor's published average ultimate loads. These tests results and the cumulative results of the site random anchor test program were examined. Discussions were held with the responsible engineer. This item remains open pending evaluation of the licensee's final report and corrective action.

7. Safety Related Components - Review of Quality Assurance Implementing Procedures - Unit 1

(Closed) Inspector Followup Item 390/78-12-03:

Adequacy of reactor coolant pump support modification instructions. Revision 1 to Watts Bar Field Instructions (WCFI) M-24, dated June 26, 1978, and a Westinghouse letter dated June 9, 1978, clarifying and expanding the instructions for pump support modification work were examined. These amplifications appeared to be adequate for the work that was accomplished. This item is closed.