



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

Report No.: 50-390/78-32

Docket No.: 50-390

License No.: CPPR-91

Category: A2

Licensee: Tennessee Valley Authority

Facility Name: Watts Bar, Unit 1

Inspection at: Watts Bar Dam, Tennessee

Inspection conducted: December 12-15, 1978

Inspector: W. P. Ang

Reviewed by:

J. C. Bryant
J. C. Bryant, Chief
Engineering Support Section No. 1
Reactor Construction and Engineering Support Branch

1/9/79
Date

Inspection Summary

Inspection on December 12-15, 1978 (Report No. 50-390/78-32)

Areas Inspected: Safety-related pipe support and restraint systems; housekeeping and general work practices. The inspection involved 24 inspector-hours on-site by one NRC inspector.

Results: Of the two areas inspected, no apparent items of noncompliance or deviations were identified in one area; one apparent item of noncompliance (infraction - failure to follow procedure during documentation of hanger inspection - paragraph 5) was identified in one area.

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DETAILS I

Prepared by:

J. C. Bryant
W. P. Ang, Mechanical Engineer
Engineering Support Section No. 1
Reactor Construction and Engineering
Support Branch

1/9/79
Date

Dates of Inspection: December 12-15, 1978

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1. Persons ContactedTennessee Valley Authority

- *T. B. Northern, Project Manager
- *J. M. Lamb, Mechanical Engineering Unit Supervisor
- *A. W. Rogers, QA Supervisor
- *J. A. Morgan, Assistant Mechanical Engineering Unit Supervisor
- L. J. Johnson, Mechanical Engineer - Group Leader

*Denotes those present at the Exit Interview.

2. Licensee Actions on Previous Inspection Findings

Licensee actions on previous inspection findings were not reviewed during this inspection.

3. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 5.

4. Independent Inspection Effort

A walk-through inspection of Unit 1 was performed. Housekeeping and general work activities on safety-related equipment were observed. Assembly work on the upper reactor vessel internals was observed. Preparatory work for main coolant pump installation was also in progress and was observed. No items of noncompliance or deviations were identified.

5. Safety-Related Pipe Support and Restraint Systems (Unit 1)

This is a follow-on inspection to inspection reports 50-390/78-12 and 50-390/78-18. Four hydraulic snubbers (1-01A-300, 1-01A-301, 1-01A-381 and 1-01A-421) were inspected prior to installation for hydraulic fluid leaks and physical damage or deformation, which may affect proper functioning of the unit. No items of noncompliance or deviations were identified.

Four installed and preliminarily inspected mechanical snubbers (74-1RHR-R36, 74-1RHR-R37, 74-1RHR-R10 and 70-1CC-R199) were visually examined for damage or deterioration and for compliance with detailed assembly drawings. Snubber assembly 74-1RHR-R36 was found to have fasteners with insufficient thread engagement, a cotter pin missing on a connecting pin, a baseplate bolt hole pattern different from drawing requirements, and an angle iron notched to allow installation of an anchor bolt in the wrong bolting pattern noted. Snubber assembly 74-1RHR-R37 had fasteners with insufficient thread engagement. Snubber assembly 70-1CC-R199 had a snubber installed in a direction reverse from the drawing requirement.

Five spring can assemblies (70-1-CC-V198, 70-1-CC-V195, 70-1-CC-V197, 74-1RHR-V11 and 74-1RHR-V38) were inspected for compliance with detailed assembly drawings. In addition, the spring can supports were inspected for hanger rod size and for proper hot and cold load scale inscriptions. Assembly Numbers 70-1CC-V198 and 74-1RHR-V38 were not properly centered on the piping. Assembly 70-1CC-V198 also was installed with a mounting plate whose bolt holes had been enlarged. Assemblies 74-1RHR-V11 and 70-1CC-V197 had bent hanger rods. Assembly 70-1CC-V195 had a loose rod.

Sway brace assembly 74-1RHR-R12 was inspected for physical damage and deterioration and for compliance with detailed assembly drawing requirements. No noncompliances or deviations were identified.

Six fixed pipe supports (1-63-124, 1-63-125, 1-63-126, 1-62A-11, 1-62A-15 and 1-62A-20) that had been installed and preliminarily inspected were visually examined for deformation, damage and compliance with detailed assembly drawings. Support numbers 1-63-124, 1-63-125 and 1-63-126 had angle irons installed in directions reverse from drawing requirements. In addition, the mounting plates were welded to embedments in lieu of anchor bolts, but operation sheets verifying correct bolting material used had been signed off as satisfactory. TVA Procedure WBNP-QCP 4.8 inspection and documentation requirements of paragraph 6.5.2.A requires in part "Verification that only certified materials are used. This includes bolting materials when specified on EN DES drawings" This is an apparent item of noncompliance with 10 CFR 50 Appendix "B" Criterion V and shall be identified as an infraction, 50-390/78-32-02.

Of the 16 installed and preliminarily inspected pipe supports and restraints inspected, 11 were found to contain some discrepancy. The licensee was requested to reinspect the 11 discrepant supports and restraints and subsequently confirmed the inspector's findings. The licensee agreed to write either nonconforming condition reports or field change requests on the discrepant conditions. The licensee also agreed to correct operation sheets to reflect the conditions noted. The licensee explained that a final inspection was still to be performed on pipe supports and restraints. The procedure for the final inspection had not yet been prepared, however. Pending further NRC evaluation of the noted discrepant conditions, this item is being identified as unresolved item 50-390/78-32-01.

6. Exit Interview

The inspector met with the licensee representatives denoted in paragraph 1 at the conclusion of the inspection. The scope and findings of the inspection of safety-related pipe support and restraint systems and the observation of housekeeping and general safety-related work activities were summarized. The item of noncompliance was originally identified as an unresolved item. The licensee was later informed by the inspector that the unresolved item was being changed to an infraction, 50-390/78-32-02 and an unresolved item, 50-390/78-32-01 as discussed in paragraph 5.