



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

Report No. 50-390/79-46

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

Facility Name: Watts Bar

Docket No. 50-390

License No. CPPR-91

Inspection at Watts Bar site near Spring City, Tennessee

Inspectors: G. A. Belisle 11/10/79
Date Signed

T. J. Donat 11-10-79
Date Signed

Approved by: H. C. Dance 11-16-79
H. C. Dance, Section Chief, RONS Branch Date Signed

SUMMARY

Inspection on October 31, 1979 - November 2, 1979

Areas Inspected

This routine, unannounced inspection involved 30 inspector-hours onsite in the areas of review of preoperational test procedures, review of new fuel receipt, inspection and storage documentation, review of previous inspection findings, review of plant procedures and operating procedures.

Results

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

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DETAILS

1. Persons Contacted

Licensee Employees

- *J. F. Groves, Plant Superintendent
- *C. C. Mason, Assistant Plant Superintendent
- *M. K. Jones, Preoperational Test Section Supervisor
- *J. E. Cross, Results Supervisor
- *J. A. Homes, QA Engineer

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on November 2, 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. Review of Preoperational Test Procedures

The inspector reviewed the following preoperational test procedures for conformance with the requirements of Regulatory Guide 1.68 and the commitments of FSAR sections 9.3.4, 9.4.7, 7.2, 9.3.3, 14.2 and Table 14.2-1:

- W-2.1 - "Chemical and Volume Control System - Charging and Letdown", Rev. 0, dated 10/9/79
- W-6.1 - "Fuel Handling Tools and Fixtures", Rev. 0, dated 9/1/79
- W-9.5 - "Operational Alignment of Nuclear Instrumentation", Rev. 0, dated 9/12/79
- TVA-5 - "Tower Containment Ventilation System", Rev. 0, dated
- TVA-50 - "Reactor Coolant Pressure Boundary Leakage Detection Systems", Rev. 0, dated 8/27/79

The inspector had no comments on W-6.1, TVA-5, and TVA-50. The inspector had the following comments on the remaining procedures:

W-2.1, "Chemical and Volume Control System - Charging and Letdown", refers to surveillance instruction SI-4.0.5.62.b for stroke time for valves 62-9A, 22A, 35A, 48A, and 84A. The present revision of this surveillance instruction does not specify these times. The inspector will follow up on this open item on a subsequent inspection. (79-46-01)

W-9.5, "Operational Alignment of Nuclear Instruments", contains, as references, various vendor technical manuals which should include the manual number and applicable revision level. Steps 5.1.1 and 5.1.2 appear to be referring to the source range nuclear instrument channels N31 and N32 but are not definitely identified. Similarly steps 5.1.4 and 5.1.5 appear to be related to the intermediate range nuclear instruments. It appears that numerous quantities are determine in the text of the procedure prior to initial criticality, during power ascension, and after shutdown from 800 MW days of operation which are to be recorded on data sheet 1 but no specific direction exists in the procedure to record the data. This will be followed as open item 79-46-02 and will be reviewed on a subsequent inspection.

6. Review of New Fuel Receipt, Inspection and Storage Documentation

The inspectors reviewed the following new fuel documentation for the 130 fuel assemblies received at Watts Bar and stored in the new fuel storage vault: NRC Form 171, Watts Bar fuel handling instruction FHI-1 Checklist 1A-1, 1B-1, 1A-2, and 1B-2 and Westinghouse Shipping Manifest and Fuel Assembly Inspection Form. The forms for all eleven shipments were reviewed and the following comments generated:

Shipment #1, Fuel Assembly Serial # and ANSI # transposed

Shipment #5, Fuel Assembly C55 had an incomplete ANSI # on checklist 1B-2
Fuel Assembly C42 had an incorrect ANSI No. from packing list, LM07B2 versus LM07BD on Checklist 1A-2

Shipment #8, Fuel Assembly Serial No. different than packing list No. on checklist 1A-2, C03 versus C08

Shipment #9, Fuel Assembly serial No. different than packing list No. on checklist 1A-2, A25 versus A24

Fuel Assembly B-16 had a different ANSI No. on checklist 1A-2 than on packing list, LM07E1 versus LM07EL.

The inspectors discussed these discrepancies with the licensee who stated he would have the assemblies reinspected as part of the final fuel receipt and storage verification. The actions taken will be inspected on a later inspection and is designated Inspector Followup Item 79-46-03.

7. Review of Previous Inspection Findings

(Closed) Open Item (390/79-29-03) concerning the need to have definitive acceptance criteria in preoperational test TVA-140, "125-VDC Diesel Generator Battery System". The inspector reviewed change number 3 to the procedure. The new acceptance criteria now references the completion and signoff of specific procedure steps. This satisfies the requirements of Appendix C of Regulatory Guide 1.68 and this item is closed.

8. Plant Procedures

The inspector reviewed the following plant documents and verified that:

- a. Administrative controls had been established for the review, approval and periodic updating of procedures.
- b. Controls had been established in writing for the preparation of procedures in the desired format.
- c. Controls had been established in writing for the issuing of new procedures and revisions to existing procedures.
- d. Controls had been established in writing for the control and disposal of outdated procedures
- e. Controls had been established in writing for the routing of procedures to the training organization.

GOI-1	-	Plant Startup From Cold Shutdown to Hot Standby
GOI-2	-	Plant Startup from Hot Standby to Minimum Load
GOI-3	-	Plant Shutdown from Minimum Load to Cold Shutdown
GOI-4	-	Plant at Hot Standby with Xenon Present
GOI-5	-	Normal Power Operations
GOI-6	-	Administrative Shutdown
AI-1	-	Authorities and Responsibilities for Safe Operation and Shutdown
AI-2	-	Clearance Procedure
AI-3	-	Plant Instruction - Control and Use
AI-4	-	Shift and Relief Turnover
AI-5	-	Log Entries and Review
AI-6	-	Access to Containment
AI-7	-	Control of Temporary Alterations and Use of the Temporary Alteration Order
AI-12	-	Shift Manning and Recall of Personnel to Plant
AOI-1	-	Reactor Trip
AOI-2	-	Malfunction of Reactor Control System
AOI-5	-	Operating with one Reactor Coolant Loop out of service
AOI-9	-	Earthquake
AOI-13	-	Loss of Essential Raw Cooling Water
AOI-18	-	Malfunction of Pressurizer Pressure Control System

- AOI-19 - Inadvertent Safety Inspection
- EOI-1 - Loss of Reactor Coolant
- EOI-2 - Loss of Secondary Coolant
- EOI-3 - Steam Generator Tube Rupture
- EOI-6 - Loss of Reactor Coolant Flow
- EOI-9 - Dropped or Damaged Fuel Assembly
- EOI-10 - Plant Fires
- PHYSI-1B - Access Control and Security of Fuel Handling and Fuel Storage Area - Temporary
- MI-62.10 - Disassemble and Repair Tube Sheet Leaks in the Non-Regenerative Letdown Heat Exchangers
- MI-62.12 - Disassemble and Repair Tube Sheet Leaks in the Excess Letdown Heat Exchangers
- MI-62.13 - Disassemble and Repair Tube leaks in the Lead Water Heat Exchanger

Standard Practice Manual, Section 3.0, Plant Instructions, WB 3.1.1 - WB 3.1.11

- SI 4.0.5.62.P.1 - Centrifugal Charging Pumps
- SI 4.0.5.63.P - Safety Injection Pumps
- SI 4.0.5.67.P - Essential Raw Cooling Water Pumps
- SI 4.0.5.72.P - Containment Spray Pumps
- SI 4.0.5.70.P - Component Cooling Pumps

One or more of the following standards were used during this review:

- A. FSAR Section 13.5
- B. ANSI 18.7 Administrative Controls for Nuclear Power Plants
- C. Regulatory Guide 1.33 Quality Assurance Program Requirements

No items of noncompliance or deficiencies were identified.

9. Operating Procedure

The inspector reviewed existing plant operating procedures using the guidelines set forth in FSAR Section 13.5 and Regulatory Guide 1.33 (Quality Assurance Program Requirements), Appendix B (Typical Procedures for Pressurized Water Reactors and Boiling Water Reactors) and ANSI Standard N18.7 (Administrative Controls for Nuclear Power Plants). To date approximately 97% of the procedures required for operation are completed. The operational staff informed the inspector that beginning in January of 1980 all existing procedures will be reviewed. The inspector had some minor comments about the venting and draining of the non-Regenerative and excess letdown heat exchangers as required in MI-62.10 and MI-62.12. The licensee stated that these concerns would be addressed during the procedure review.

No items of noncompliance or deficiencies were identified.