



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

Report Nos. 50-390/81-17 and 50-391/81-17

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

Facility Name: Watts Bar Units 1 and 2

License Nos. CPPR-91 and CPPR-92

Inspection at Watts Bar site near Spring City, TN

Inspector: *T. D. Gibbons for* 9-29-81  
T. D. Gibbons Date Signed

Accompanying Personnel: J. Y. Chen, Taiwan Atomic Energy Council

Approved by: *T. E. Conlon* 9-29-81  
T. E. Conlon, Section Chief Date Signed  
Engineering Inspection Branch  
Engineering and Technical Inspection Division

SUMMARY

Inspection on September 1-4, 1981

Areas Inspected

This routine, unannounced inspection involved 29 inspector-hours onsite in the areas of licensee actions on previous inspection findings, IE Bulletins, and Licensee Identified Items.

Results

Of the areas inspected, no violations or deviations were identified.

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## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*J. E. Wilkins, Project Manager
- \*R. Olsen, Construction Engineer
- \*A. W. Rogers, QA Supervisor
- \*H. G. McFarland, QA Engineer
- J. H. Perdue, Supervisor Electrical Engineering Unit (EEU)
- \*E. J. Austin, Engineer EEU
- \*E. Burke, Assistant Construction Engineer
- \*J. Thompson, Supervisor, Startup Test and Coordination Unit
- \*T. Hayes, Supervisor Instrumentation Engineering Unit
- \*T. R. Trail, Coordinator Records Unit

#### NRC Resident Inspector

J. A. McDonald

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on September 4, 1981 with those persons indicated in paragraph 1 above.

### 3. Licensee Action on Previous Inspection Findings

- a. (Closed) Violation V 390/81-05-03, 391/81-05-03, "Cable and Conduit Installation". Tennessee Valley Authority (TVA) letter of response dated May 28, 1981 has been reviewed and determined to be acceptable by Region II. The inspector held discussions with the Electrical Engineering Unit Supervisor and examined the corrective actions as stated in the letter of response. The inspector concluded that TVA had determined the full extent of the subject noncompliance, performed the necessary survey and follow-up actions to correct the present conditions and developed the necessary corrections to preclude recurrence of similar circumstances. The corrective actions identified in the letter of response have been implemented.
- b. (Closed) Unresolved Item 390/79-20-03, 391/79-16-03, "Acceptance Criteria for Factory Installed Wiring Terminations in the 6900 V Shutdown Boards". The licensee has issued Quality Control Procedure WBNP-QCP 3.16 titled "Reinspection of the 6900 V Shutdown Boards". The procedure has been reviewed by Design and incorporates the information received from the vendor.

## 4. Unresolved Items

Unresolved items were not identified during this inspection.

## 5. Licensee Identified Items

- a. (Closed) Item 390/80-17-01 and 391/80-17-01, "Pumps Aligned with Uncalibrated Dial Indicators" (10 CFR 50.55(e)). On July 15, 1981, TVA notified Region II of a 50.55(e) item concerning pumps aligned with uncalibrated dial indicators. Final Report was submitted on August 31, 1981. The report has been reviewed and determined to be acceptable by Region II. The inspector held discussions with responsible licensee representatives, reviewed supporting documentation, and observed representative samples of work to verify that the corrective actions identified in the report have been completed.
- b. (Closed) Item 390/80-17-02 and 391/80-17-02, "Deficiencies in Work Package Preparation" (10 CFR 50.55(e)). On April 24, 1981, TVA notified Region II of a 50.55(e) item concerning deficiencies in work plan preparation. Final Report was submitted on September 3, 1981. The report has been reviewed and determined to be acceptable by Region II. The inspector held discussions with responsible licensee representatives, reviewed supporting documentation, and observed representative samples of work to verify that the corrective actions in the report have been completed.
- c. (Open) Item 390/80-17-03 and 391/80-17-03, "Incomplete List of Outstanding Documentation of Work" (10 CFR 50.55(e)). On March 20, 1981, TVA notified Region II of a 50.55(e) item concerning incomplete list of outstanding documentation of work. Final report was submitted on May 20, 1981. The report has been reviewed and determined to be acceptable by Region II. The inspector held discussions with responsible licensee representatives, reviewed supporting documentation, and observed representative samples of work to verify that the corrective actions identified in the report have not been completed. This matter remains open pending completion of the corrective actions.
- d. (Open) Item 390/79-33-01 and 391/79-28-01, "Insufficient Flexibility of Low Head Injection Test Lines" (10 CFR 50.55(e)). On July 27, 1981, the licensee notified Region II of a 50.55(e) item concerning insufficient flexibility of low head injection test lines. The final report was submitted on August 22, 1981. The report has been reviewed and determined to be acceptable by Region II. The inspector held discussions with responsible licensee and/or contractor representatives, reviewed supporting documentation, and observed representative samples of work to verify that the corrective actions identified in the report have not been completed. This matter remains open pending completion of the corrective actions.

- e. (Closed) Item 390/80-24-02 and 391/80-18-02, "GE Circuit Breakers Impulse Level" (10 CFR 50.55(e)). On June 20, 1980, TVA notified Region II of a 50.55(e) item concerning GE circuit breaker impulse level. Final report was submitted on January 29, 1981. The report has been reviewed and determined to be acceptable by Region II. The inspector held discussions with responsible licensee representatives, reviewed supporting documentation to verify that the corrective action identified in the report has been completed.
- f. (Open) 390/81-17-04 and 391/81-17-04, "Weld Deficiencies in Box Anchors" (10 CFR 50.55(e)). On April 10, 1981, the licensee notified Region II of a 50.55(e) item concerning weld deficiencies in box anchors.
- g. (Open) 390/81-17-05 and 391/81-17-05, "Insufficient Documentation for Protective Devices" (10 CFR 50.55(e)). On March 13, 1981, the licensee notified Region II of a 50.55(e) item concerning insufficient documentation for protective devices.
- h. (Open) 390/81-17-06 and 391/81-17-06, "HVAC-QC Audit WB-G-81-06 Deficiency 10" (10 CFR 50.55(e)). On March 27, 1981, the licensee notified Region II of a 50.55(e) item concerning deficiency 10 on the QA audit WB-G-81-06 in the area of HVAC.
- i. (Open) 390/81-17-07 and 391/81-17-07, "Safety Related Hydrostatic Tests". On December 30, 1980, the licensee notified Region II of a 50.55(e) item concerning a QA audit WB-M-80-16 which related to the hydrostatic testing.
- j. (Open) 390/CDR-81-64 and 391/CDR-81-60, "Trip Settings for the 480V Shutdown Boards (10 CFR 50.55(e)). On July 17, 1981, the licensee notified Region II of a 50.55(e) item concerning the documentation of the trip settings for the 480V shutdown boards.
- k. (Open) 390/81-17-08 and 391/81-17-08, "Snubber Torqueing" (10 CFR 50.55(e)). On August 11, 1981, the licensee notified Region II of a 50.55(e) item concerning the torqueing of snubbers.
- l. (Open) 390/81-17-09 and 391/81-17-09, "Lack of Updated Documentation" (10 CFR 50.55(e)). On August 28, 1981, the licensee notified Region II of a 50.55(e) item concerning the lack of updated documentation in the electrical area.
- m. (Open) 390/81-17-10 and 391/81-17-10, "Lack of Inspection - Category I Structures (10 CFR 50.55(e)). On September 3, 1981, the licensee notified Region II of a 50.55(e) item concerning the lack of inspection of Category I structures.

## 6. IE Bulletins (IEB)

- a. (Closed) IEB No. 80-16, Potential Misapplication of Rosemont Incorporated, Model 1151 Pressure Transmitters, Units 1 and 2. TVA letter of August 29, 1981, reports that the subject type pressure transmitters are not used for safety-related functions at the station.
- b. (Closed) IEB No. 81-03, Flow Blockage of Cooling Water in Safety Systems Components by Corbicula Sp., Units 1 and 2. The inspector has reviewed TVA letter of July 21, 1981 and determined that the requested actions of the bulletin have been acceptably addressed. The inspector held discussions with responsible licensee representatives and reviewed supporting documentation to verify that the actions identified in the letter of response have been completed.
- c. (Closed) IEB No. 80-19, Mercury-Wetted Matrix Relay in Reactor Protective Systems, Units 1 and 2. TVA letter of September 4, 1980, reports that the subject type relays are not in safety-related systems at the station.
- d. (Closed) IEB No. 80-23, Failures of Solenoid Valves Manufactured by Valcor Engineering Corporation, Units 1 and 2. TVA letter of March 31, 1981, reports that the subject type solenoid valves are not used for safety-related functions at the station.
- e. (Closed) The following bulletins are not applicable to this station.
  - (1) IEB 81-01
  - (2) IEB 80-10
  - (3) IEB 80-17

## 7. Employee Concerns

The Resident Inspector was contacted by a licensee employee regarding wire checks which were not completed prior to pre-ops testing. The inspector discussed the concern with licensee representatives. The licensee was aware of the discrepancy identified and had issued nonconforming condition reports (NCR) 3086R (March 18, 1981) and 3575R (August 21, 1981). The licensee also reported this item to Region II as a 10 CFR 50.55(e) item on April 28, and August 28, 1981, respectively. The employee recontacted the Resident Inspector to question validity of preop testing will be invalidated if panels are wire checked after testing.

The inspector determined that the employee's concern is valid, but that the licensee is taking the required corrective actions. Corrective actions regarding the identified concern will be tracked as identified in paragraph 5.1.