



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
230 PEACHTREE STREET, N.W. SUITE 1217  
ATLANTA, GEORGIA 30303

*Central File*  
*50-390*  
*391*

In Reply Refer To:  
RII:TDG  
50-390/78-15  
50-391/78-13

**JUN 30 1978**

Tennessee Valley Authority  
Attn: Mr. N. B. Hughes  
Manager of Power  
830 Power Building  
Chattanooga, Tennessee 37401

Gentlemen:

This refers to the inspection conducted by Mr. T. D. Gibbons of this office on May 31 - June 2, 1978, of activities authorized by NRC Construction Permit Nos. CPPR-91 and CPPR-92 for the Watts Bar Nuclear Plant, and to the discussion of our findings held with Mr. T. B. Northern, Jr. at the conclusion of the inspection.

Areas examined during the inspection and our findings are discussed in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

Within the scope of this inspection, no items of noncompliance were disclosed.

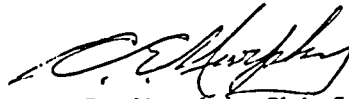
In accordance with Section 2.790 of the NRC's "Rules of Practice", Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractor) believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must include a full statement of the reasons on the basis of which it is claimed that the information is proprietary, and should be prepared so that proprietary information identified in the application is contained in a separate part of the document. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

*GD*

JUN 30 1978

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,



C. E. Murphy, Chief  
Reactor Construction and  
Engineering Support Branch

Enclosure:

Inspection Report Nos.  
50-390/78-15 and 50-391/78-13

cc w/enclosure:

Mr. J. E. Gilleland  
Assistant Manager of Power  
830 Power Building  
Chattanooga, Tennessee 37401

Mr. T. B. Northern, Jr.  
Project Manager  
Watts Bar Nuclear Plant  
P. O. Box 2000  
Spring City, Tennessee 37381

Mr. J. F. Cox  
400 Commerce Street  
W9D214  
Knoxville, Tennessee 37902



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
230 PEACHTREE STREET, N.W. SUITE 1217  
ATLANTA, GEORGIA 30303

Report Nos.: 50-390/78-15 and 50-391/78-13

Docket Nos.: 50-390 and 50-391

License Nos.: CPPR-91 and CPPR-92

Category: A2, A2

Licensee: Tennessee Valley Authority  
830 Power Building  
Chattanooga, Tennessee 37401

Facility Name: Watts Bar Nuclear Plant, Units 1 and 2

Inspection at: Watts Bar, Tennessee

Inspection Conducted: May 31-June 2, 1978

Inspector: T. D. Gibbons

Reviewed by:

*J. C. Bryant for*  
\_\_\_\_\_  
J. C. Bryant, Chief  
Engineering Support Section No. 1  
Reactor Construction and Engineering  
Support Branch

*6-28-78*  
\_\_\_\_\_  
Date

Inspection Summary

Inspection on May 31-June 2, 1978 (Report No. 50-390/78-15 and 50-391/78-13)

Areas Inspected: Electrical (systems and components) work and work activities QC records. Inspection involved 23 inspector-hours on site by one NRC inspector.

Results: No items of noncompliance were identified.

DETAILS I

Prepared by:

T. D. Gibbons  
T. D. Gibbons, Electrical Engineer  
Engineering Support Section No. 1  
Reactor Construction and Engineering  
Support Branch

6/28/78  
Date

Dates of Inspection: May 31-June 2, 1978

Reviewed by:

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

6-28-78  
Date

1. Persons Contacted

Tennessee Valley Authority (TVA)

- \*T. B. Northern, Jr., Project Manager
- A. W. Rogers, Site QA Supervisor
- J. H. Perdue, Electrical Engineering Unit Supervisor
- \*E. J. Austin, Electrical Engineer

\*Denotes attendance at exit interview.

2. Licensee Actions on Previous Inspection Findings

The licensee actions on previous inspection findings were not reviewed during this inspection.

3. Unresolved Items

There were no new unresolved items identified during this inspection.

4. Independent Inspection Effort

The inspector conducted a walk-through inspection examining raceway and cable installations to assure the FSAR requirements were being incorporated. This inspection was conducted on the second shift. The inspector also examined the installation of various switchgear panels.

Within the areas examined there were no items of noncompliance identified.

5. Procedures - Fire Prevention/Protection (Units 1 and 2)

The licensee has issued field instruction G2, "Construction Fire Prevention and Protection Procedure." This procedure incorporates the Division of Construction Procedure as applicable to the site. The procedure covers the storage, handling and use of flammable and combustible materials and the control of ignition sources. The Public Safety Office (PSO) is responsible for the use, testing and maintenance of fire suppression equipment and auxiliary equipment. The PSO has identified an action plan and trained fire fighters. Each PSO officer has been trained in fire protection and suppression. The site has also started a fire brigade to support the PSO operation. Field Instruction G2 has been approved by management and is under the normal field instruction revision and distribution procedures.

The inspector examined 25 fire extinguishers and four hose stations to assure that maintenance and testing was conducted. The inspector observed cutting and welding in the auxiliary building and the installation of foam in the reactor building to assure that the required fire prevention procedure was followed.

Within the areas examined there were no items of noncompliance identified.

6. Electrical (Components and Systems II) Observation of Work and Work Activities (Units 1 and 2)

The inspector selected batteries O-BAT-236-1D and O-BAT-236-3F and DC bus and distribution panels O-BD-236-1D and O-BD-236-3F for inspection. The inspector examined the work and work records in the areas of receipt inspection, storage, handling, identification, inspection procedure implementation, nonconformance control, protection, separation and inspector qualification.

The inspector selected eight electrical motors as follows:  
1 MTR-3-118A, 1 MTR-3-128B, 2 MTR-3-18B, 2 MTR-3-128B,  
1 MTR-62-101, 2 MTR-62-104B, 1 MTR-63-15B and 2 MTR-63-15B. The motors were examined to assure that the FSAR requirements were being complied with in the areas of receiving inspection, storage, identification, handling, installation and associated QC activities.

Twelve motor operated valve operators were selected as follows:  
1-FCV-3-126A-B, 1-FCV-3-126B-B, 1-LCV-62-133B, 1-LCV-62-132A,  
1-FCV-3-116A-A, 1-FCV-3-116A-B, 2-FCV-3-126A-B, 2-FCV-3-126B-B,  
2-LCV-62-133-A, 2-LCV-62-133-B, 2-FCV-3-116A-A, and

2-FCV-3-116-A-B. The motor operators were examined to assure that receiving inspection, identification, storage, handling, installation and inspection had been completed to QAM requirements.

The inspector selected two battery chargers, 0-CHG-236-1D and 0-236-3F, two inverters, 1-INV-235-4G and 2-INV-235-4G, and two vital AC inverter Boards, 1-BD-235-1-D and 1-BD-235-3-F, for inspection. The applicable work and work records were reviewed in the areas of receiving inspection, acceptance requirements, identification, installation, nonconformance control, protection, cleanliness control, calibration and trip settings where applicable, location, separation, redundancy and control of QC procedures.

Within the areas examined there were no items of noncompliance identified.

7. Electrical (Components and Systems II) Review of Quality Records  
(Units 1 and 2)

The inspector selected the items identified in paragraph 6 for a quality records review. The records were reviewed to assure that FSAR and QAM requirements were met in the areas of receiving inspection, vendor certifications, source inspection, shipping releases, storage, storage inspection, handling, cleanliness, installation, inspections, calibrations if required and post installation protection. The inspector reviewed the relay coordination during a trip to Design Engineering on July 7, 1977.

Within the areas examined there were no items of noncompliance identified.

8. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the site inspection on June 2, 1978. The inspector summarized the scope of the inspection:

- a. Procedures Fire Prevention/Protection
- b. Electrical (Components and Systems) Observation of Work and Work Activities.

c. Electrical (Components and Systems) Review of Quality Records.

There were no items of noncompliance identified.