



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

JUL 22 1977

In Reply Refer To:
RII:TDG
50-390/77-8
50-391/77-8

Tennessee Valley Authority
Attn: Mr. Godwin Williams, Jr.
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 July 5-8, 1977, of activities authorized by NRC Construction Permit Nos. CPPR-91 and CPPR-92 for the Watts Bar Nuclear Plant Unit 1 and 2 facilities, 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 attached 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.

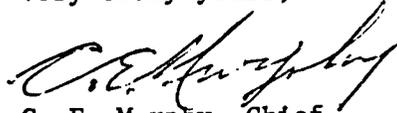
In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the attached inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you believe to be proprietary, it is necessary that you submit a written application to this office requesting that such information be withheld from public disclosure. If no proprietary information is identified, a written statement to that effect should be submitted. If an application is submitted, it must fully identify the bases for which information is claimed to be proprietary. The application should be prepared so that information sought to be withheld is incorporated in a separate paper and referenced in the application since the application will be placed in the Public Document Room. Your application, or written statement, should be submitted to us within 20 days. If we are not contacted as specified, the attached report and this letter may then be placed in the Public Document Room.

Tennessee Valley Authority

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

Very truly yours,



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

Attachment:

RII Inspection Report Nos.
50-390/77-8 and 50-391/77-8

cc: Mr. J. E. Gilleland
Assistant Manager of Power
831 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. Stan Duhan
400 Commerce Street
E4D112
Knoxville, Tennessee 37902



UNITED STATES
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230 PEACHTREE STREET, N.W. SUITE 1217
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Report Nos.: 50-390/77-8 and 50-391/77-8

Docket Nos.: 50-390 and 50-391 License Nos.: CPPR-91 and CPPR-92

Categories: 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 Dam, Tennessee; Design Offices, Knoxville, Tennessee

Inspection conducted: July 5-8, 1977

Inspector: T. D. Gibbons

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

7/22/77
Date

Inspection Summary

Inspection on July 5-8, 1977 (Report Nos. 50-390/77-8 and 50-391/77-8)

Areas Inspected: Electrical (Systems and Components) observation of work, work activities, and review of quality records; Fire prevention/protection; Briefing of permanent fire protection at engineering design offices. The inspection involved 29 inspector-hours on the site and engineering design office by one NRC inspector.

Results: Of the four areas examined there were no items of noncompliance identified.

DETAILS I

Prepared by:

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

7-22-77
Date

Dates of Inspection: July 5-8, 1977

Reviewed by:

T. E. Conlon for
T. E. Conlon, Chief
Engineering Support Section No. 1
Reactor Construction and Engineering
Support Branch

7/23/77
Date

1. Persons Contacted

Tennessee Valley Authority (TVA)

*T. B. Northern, Jr., Project Manager
*A. W. Rogers, Site QA Supervisor
*J. H. Perdue, Supervisor, Electrical Engineering Unit
C. Morgan, Assistant to Director, Construction
H. E. McConnell, Branch Chief, Electrical Design
R. J. O'Laughlin, Fire Protection Engineer

*Denotes those attending the exit interview.

2. Licensee Actions on Previous Inspection Findings (Units 1 and 2)

The 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. Unresolved items disclosed during the inspection are discussed in Paragraph 5.

4. Independent Inspection Effort (Units 1 and 2)

The inspector travelled to the Engineering Design Office at Knoxville where he was given a preliminary briefing on the fire protection system to be installed. The briefing covered sprinkler, standpipe and fire pump installation design. The fire protection installation will be inspected as the work is done.

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

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

The inspector reviewed the activities of the Public Safety Group and Safety Section which are responsible for the fire protection and prevention. The fire prevention training records for each officer were examined. The fire vehicle and the fire extinguisher servicing area were observed. The necessary procedures and site fire plan are being prepared. This item is unresolved pending the completion and issuance of the required procedure and site fire plan. This item will be identified as 390/77-8U1 and 391/77-8U1.

6. Electrical (Components and Systems I) Observation of Work and Work Activities (Unit 1)

The inspector reviewed the installation of the emergency diesel generator (EDG) and its auxiliary equipment. The areas inspected included receiving inspection, storage, handling, location, separation and construction inspection. The post installation protection and cleanliness were observed. The requirements for the above work consisted of the FSAR, vendor instructions and site procedures.

The inspector inspected the installation of 6900 volt shutdown board 1AA which is feed from EDG -1. The inspection included review of receiving inspection, identification, installation procedures, protection, cleanliness, location, separation and redundancy and procedure revision control. The relay calibration and trip setting requirements were being prepared by engineering.

The inspector selected the 480V load center 1A1A and motor control centers 1A1A and 1AA which are fed from shutdown board 1AA. These items were inspected to verify that receiving inspection, storage, handling, identification, installation, anchoring location, and inspection were in conformance with the FSAR, vendor instructions and site procedures. Nonconformance reports involving the equipment were reviewed to verify their accuracy and disposition. Several inspectors were interviewed to verify qualification.

Within the areas examined no items of noncompliance were identified.

7. Electrical (Components and Systems I) Review of Quality Records

The inspector reviewed the quality records of the equipment inspected in Paragraph 6. The records confirm that receiving inspection, and source inspections had been conducted. The Inspection and Test group conducted the source inspection and issued shipping releases after all inspection and testing at the vendor's facility had been completed. The records confirm that wiring verification and installation inspections were conducted.

The inspector selected 10 nonconformance reports (NCR) for review. In each case the current status was identified. The NCR's were complete, reviewed as required and the resolution status was identified.

A review of three inspector records included training and testing reports which qualified them for their duties.

Four QA audits were reviewed to verify that required audits were conducted and that the deficiencies were corrected. Corrective action included steps to prevent repetition of the deficiency.

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 July 7, 1977. The inspector informed the licensee that he would be briefed on the permanent plant fire protection at the Engineering Design office at Knoxville on July 8, 1977. The inspector summarized the scope of the inspection:

- a. Fire prevention/protection (construction)
- b. Electrical components and systems
 - (1) Observation of work and work activities
 - (2) Review of quality records

The inspector identified the unresolved item discussed in paragraph 5. The licensee stated they would continue their efforts.