



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
230 PEACHTREE STREET, N.W. SUITE 818
ATLANTA, GEORGIA 30303

FEB 10 1978

Central file
50-390
391

In Reply Refer To:
RII:BJC
50-390/78-1
50-391/78-1

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 Dr. B. J. Cochran of this office on January 17-20, 1978, 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 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.

We have examined actions you have taken with regard to previously identified enforcement matters and unresolved items. The status of these items is discussed in the enclosed report.

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.

FEB 10 1978

Tennessee Valley Authority

-2-

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:

RII Inspection Report Nos.
50-390/78-1
50-391/78-1

cc w/encl:

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. C. S. Walker
400 Commerce Street
W9D199
Knoxville, Tennessee 37902



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
230 PEACHTREE STREET, N.W. SUITE 818
ATLANTA, GEORGIA 30303

Report Nos.: 50-390/78-01 and 50-391/78-01

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
Knoxville, Tennessee

Inspection conducted: January 17-20, 1978

Inspector: B. J. Cochran

Reviewed by:

A. R. Herdt
A. R. Herdt, Chief
Projects Section

Reactor Construction and Engineering Support Branch

2/9/78
Date

Inspection Summary

Inspection on January 17-20, 1978 (Report Nos. 50-390/78-1
and 50-391/78-1)

Areas Inspected: Resolution of previously identified unresolved items and items of noncompliance; installation of foam insulation in unit 1 containment building; conformance to Part 21; construction status. The inspection involved 20 inspector-hours at the construction site and 4 hours at the corporate office by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

DETAILS I

Prepared by: AR Herdt
B. J. Cochran, Principal Inspector
Projects Section
Reactor Construction and Engineering
Support Branch

2/9/78
Date

Dates of Inspection: January 17-20, 1978

Reviewed by: AR Herdt
A. R. Herdt, Chief
Projects Section
Reactor Construction and Engineering
Support Branch

2/9/78
Date

1. Persons Contacted

Tennessee Valley Authority

- *T. B. Northern, Jr., Project Manager
- *A. W. Rogers, Supervisor QA
 - J. R. Inger, QA Unit
 - H. G. McFarland, QA Unit
 - R. L. Young, QA Unit
 - J. F. Fifrlick, QA Unit
- *R. L. Heatherly, Supervisor, QC&R Unit
- *J. S. Colley, EN DES QEB
- *J. H. Perdue, Supervisor, Electrical Engineering Unit
- *J. M. Lamb, Supervisor, Mechanical Engineering Unit
- *J. E. Treadway, Construction Superintendent
- *R. D. Anderson, Electrical Engineer
- *J. A. Morgan, Assistant Supervisor, Mechanical Engineer
- *J. G. Shields, Assistant Construction Engineer
- *H. C. Richardson, Construction Engineer
- *S. Johnson, Assistant Construction Engineer
- *C. J. Holmes, Assistant Construction Superintendent
 - J. D. Shanlever, Mechanical Engineer
 - J. A. Kerr, Mechanical Engineer
 - J. P. Knight, QA Manager, OEDC
 - W. D. Deford, Supervisor, QA Engineering Section, EN DES
 - J. L. Parris, Chief, Quality Engineering Branch
 - P. L. Duncan, Supervisor, QA Group
 - C. S. Walker, Supervisor, NLS
 - C. A. Myers, Supervisor, NLS PWR Group
 - J. F. Cox, Supervisor, NLS BWR Group

S. Dothard, Licensing Engineer
C. R. Morgan, Sr. Licensing Engineer

The inspector also talked with craftsmen in their work area and members of the engineering units.

*Denotes those present at the exit interview.

2. Licensee Actions of Previous Inspection Findings

a. (Closed) Unresolved Item (390/77-08U1 and 391/77-08U1): Fire Prevention/Protection Procedures

The inspector examined the second draft of the Construction Fire Prevention and Protection Plan issued January 17, 1978. The plan defines the interface requirements and responsibilities for fire control among Public Safety, Power Production and Construction.

In addition to the preparation of the fire control plan, Fire Brigades have been set up for each shift and a formal training program initiated by the Public Safety Firefighter. Furthermore, a surprise fire drill was enacted at the Diesel Generator Building (DGB) on October 13, 1977, where approximately fifty construction personnel were working. Within one minute after notification of the fire one member of the fire brigade was on hand, within three minutes ten members were present and after four minutes the DGB was cleared of all people.

This unresolved item is considered closed.

b. (Closed) Unresolved Item (390/77-09U1 and 391/77-09U1): Air Relays

The defective relays were identified as being in three relay panels and are connected in the Engineered Safety Features Actuation System. One Hundred Thirty Eight (138) relays have been identified and are scheduled for replacement.

This item is considered closed.

c. (Closed) Unresolved Item (390/77-13U2 and 391/77-13U2): Change in Flood Level

As set forth in the Standard Review Plan, TVA reviewed the flood level at Watts Bar. The analyses have now been completed

and indicate that there is no change in the flood elevation for Watts Bar. No changes to the facility are anticipated.

This item is considered closed.

d. (Closed) Infraction (390/77-12N1 and 391/77-12N1): Failure to Adhere to Procedure for Concrete Placement and Documentation

TVA acknowledged the infraction and initiated corrective actions to avoid further noncompliances in the placement of concrete. The corrective actions included retraining of all personnel responsible for concrete placement and testing in the applicable procedures. The retraining concentrated on the importance of following procedures in every detail, avoiding short cuts and checking to assure that everything is in order before proceeding with the activity.

This item is considered closed.

3. Unresolved Items

No new unresolved items were identified during this inspection.

4. Independent Inspection Effort

This inspection effort concerned the status of construction and installation of components for Units 1 and 2.

The inspector talked with craftsmen and observed their work activities. Among the activities observed were the installation and welding of the liner plate in the reactor refueling cavity, welding of the liner in the reactor bulkhead cavity, welding on the Unit 2 containment building dome and the installation of the foam insulation in the Unit 1 containment building.

No items of noncompliance or deviations were identified.

5. Conformance to 10 CFR 21

In conformance to the requirements of 10 CFR 21, TVA has established controls and procedures for posting of Part 21 in conspicuous locations on bulletin boards about the construction site and in the Knoxville offices.

TVA has revised Engineering Procedures EN DES EP 1.26 Nonconformances -Reporting and Handling, EN DES EP 2.02 Determining and Reporting NRC-OIE Reportable Conditions and Construction Procedure QAP-15.01 plus preparing a new procedure EN DES EP 2.12 Implementation of Title 10 of the Code of Federal Regulations, Part 21 (10 CFR 21) to provide detailed instructions for the identification, handling and notification of items reported under Part 21.

No items of noncompliance or deviations were identified.

6. Exit Interview

The inspector met with the licensee representatives denoted in paragraph 1 at the conclusion of the inspection on January 20, 1978. The inspector summarized the scope of the inspection as follows: satisfactory resolution of previously identified item of noncompliance and three unresolved items; inspection of construction activities; and review of measures taken to comply with the requirements of 10 CFR 21. No items of noncompliance or unresolved items were identified.