



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
230 PEACHTREE STREET, N.W. SUITE 1217
ATLANTA, GEORGIA 30303
JUL 7 1977

In Reply Refer To:
IE:II:VLB
50-390/77-6
50-391/77-6

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. V. L. Brownlee of this office on June 7-10, 1977, of activities authorized by NRC Construction Permit Nos. CPPR-91 and CPPR-92 for the Watts Bar Nuclear Plant, Units 1 and 2 facility, 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.

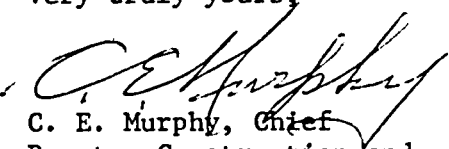
We have examined actions you have taken with regard to previously identified inspection findings. These are discussed in the attached inspection report.

During the inspection, it was found that certain activities under your license appear to be in noncompliance with NRC requirements. This item and references to pertinent requirements are listed in the attached Notice of Violation to this letter. This notice is sent to you pursuant to the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Section 2.201 requires you to submit to this office, within 20 days of your receipt of this notice, a written statement or explanation in reply including: (1) corrective steps which have been taken by you, and the results achieved; (2) corrective steps which will be taken to avoid further noncompliance; and (3) the date when full compliance will be achieved.

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.

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

Attachments:

Notice of Violation
RII Inspection Reports Nos.
50-390/77-6 and 50-391/77-6

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

ATTACHMENT A
NOTICE OF VIOLATION

Based on the results of an NRC inspection conducted June 7-10, 1977, certain items appear to be in noncompliance with 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Processing Plants" as indicated below. This item is a deficiency.

390/77-6N1
391/77-6N1

Failure to Follow Procedure - Field Procurement

Criterion V of Appendix B to 10 CFR 50, as implemented by the PSAR, Section 17.1A.5, states in part that, "Activities affecting quality shall be prescribed by documented instructions, procedures, . . . and shall be accomplished in accordance with these instructions, procedures, . . ."

Contrary to the above requirement, field procurement documents of safety-related material were initiated and processed by field personnel without proper review and approval of site QA unit personnel as required by WBNP QCP-1.20. (Details I, paragraph 5)



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Report Nos.: 50-390/77-6 and 50-391/77-6

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: Design Offices, Knoxville, Tennessee
Watts Bar Dam, Tennessee

Inspection conducted: June 7-10, 1977

Inspector: V. L. Brownlee

Reviewed by:

C. E. Murphy
C. E. Murphy, Chief

Reactor Construction and Engineering Support Branch

7/1/77
Date

Inspection Summary

Inspection on June 7-10, 1977: (Report Nos. 50-390/77-6 and 50-391/77-6)

Areas Inspected: Licensee action on previously identified unresolved items; licensee action on Westinghouse fuel handling accident letter; field procurement; work activities for reinforced concrete placement in Unit 2 reactor cavity. The inspection involved 27 inspector-hours on site or at the licensee's design offices by one NRC inspector.

Results: Of the four areas inspected, no items of noncompliance or deviations were identified in three areas; an apparent item of non-compliance (deficiency - failure to follow procedures relative to QA Unit review of safety-related measurement documents - paragraph 5) was identified.

DETAILS I

Prepared by:

V. L. Brownlee for
V. L. Brownlee, Principal Inspector
Projects Section
Reactor Construction and Engineering
Support Branch

7/1/77
Date

Dates of Inspection: June 7-10, 1977

Reviewed by:

J. C. Bryant for
J. C. Bryant, Chief
Projects Section
Reactor Construction and Engineering
Support Branch

7/1/77
Date

1. Persons Contacted

Tennessee Valley Authority (TVA)

E. R. Dilworth, Head Mechanical Engineer
C. R. Morgan, Nuclear Engineer, Licensing Section
L. G. Hebert, QA Engineer, OEDC
*T. B. Northern, Project Manager
*A. W. Rogers, Supervisor, QA Unit
*J. G. Shields, Assistant Construction Engineer
*R. L. Heatherly, Supervisor, QC&R Unit
S. K. Walker, QC&R Unit
J. R. Inger, QA Unit
J. R. Fifrick, QA Unit
*J. S. Colley, ENDES QEB
*J. M. Lamb, Supervisor, Mechanical Engineering Unit
L. C. Northard, Jr., Supervisor, Welding and NDE Unit
*J. C. Cofield, Supervisor Materials Engineering Unit

The inspector also talked with and interviewed 17 other licensee employees including members of the engineering units, welders, QA personnel, QC inspectors, pour foremen and pour crew members.

*Denotes those attending the exit interview.

2. Licensee Actions on Previous Inspection Findings

(Closed) Infraction (77-3-A1(II)) - Failure to Follow Procedures
(Unit 1)

RII has evaluated TVA's letter of response dated May 13, 1977, and concurs with the exception to the proper stating of the infraction. The infraction should have read:

Infraction

77-3-A1(II) Failure to Follow Procedures (Unit 1)

Criterion V of Appendix B, 10 CFR 50, as implemented by commitments set forth in the PSAR, Section 17, Paragraph 17.1A.5 states, in part, that activities affecting quality are prescribed by documented instructions . . . Paragraph 5.2 of WBNP-QCP 1.11, "QA Training Program," states, in part, that engineering personnel engaged in activities controlled by QC procedures are certified to these procedures prior to performing these activities.

Contrary to the above commitment, the licensee had not certified all Level II NDE personnel performing visual inspection during welding surveillance to WBNP-QCP-4.13, RO, "Visual Examination of ASME Welds."

The corrective actions identified in the licensee letter of response are found to be acceptable.

The inspector discussed the corrective actions with the Supervisor, Welding and NDE Unit, and reviewed the Welding and NDE Unit personnel qualification records. All Level II NDE employees have now successfully completed the examination on procedure WBNP-QCP-4.13, RO, "Nondestructive Examination Procedure" (Visual). RII has no further questions regarding this matter.

(Closed) Unresolved Item (76-10/2): Refueling and Primary Storage Water Tank Piping Tunnels - Seismic Criteria (10 CFR 50.55(e)) (Units 1 and 2)

TVA submitted its final report on May 25, 1977. The report was reviewed by RII and was found to be acceptable.

The inspector held discussions with responsible field engineers and reviewed applicable drawings and determined that responsible field engineers are knowledgeable of the changes and that revised drawings are in the field. Based on the above findings, RII has no further questions regarding this matter.

(Closed) Unresolved Item (76-12/1): Lifting Equipment Load Testing (Unit 1)

The problem involved the matter of the Engineers documenting, by memo, conditions which were not serious enough to invalidate tests, but were serious enough to specify in memos that they should be resolved prior to setting of components. This method of documenting adverse conditions did not provide for proper alerting or tagging of conditions nor provide for documentation of corrective action.

TVA site management informed the inspector that WBNP-QCP-1.4, "Conditions Adverse to Quality and Corrective Action," would control the documenting of adverse conditions. WBNP-QCP-1.4 is being revised to require the tagging of such conditions. RII has no further questions regarding this matter.

3. Unresolved Items

No new unresolved items were detected.

4. Independent Inspection Effort

a. Licensee Response to Westinghouse Letter Concerning Postulated Fuel Handling Accident

The inspector held discussions with responsible representatives and reviewed correspondence relative to the subject matter. The inspector concluded that the Westinghouse letter was received in a timely manner and distributed to the responsible groups for evaluation. Evaluations were performed and appropriate actions taken. There were no items of noncomformance identified within this area of inspection.

b. Independent Inspection Effort, Concrete (Unit 2)

The inspector observed prepour preparations, QC inspection and green cutting activities for joint preparation of a 208 cubic yard pour in the reactor cavity wall.

Pour preparation was adequate, pour cards were signed off and subsequent cutting and protection activities were made in accordance with accepted practice and the concreting QA/QC program requirements.

The inspector stayed over two and one half hours on the swing shift, June 8, 1977, to observe the concreting operations.

5. Partial Mid-Term Construction Permit QA Inspection (Units 1 and 2)

The inspector performed a review and evaluation of the licensee's site procurement document control program. WBNP-QCP-1.20, "Site Control of Procurement Documents," is the controlling procedure.

The inspector reviewed the procedure and field purchase documents for welding material and structural materials.

The inspector identified two site purchase documents, RD-538046 and RD-538027, which had been stamped "QA Required" by the principal engineer, but the field requisition slip had not received the review stamp by the site QA Unit as required by WBNP-QCP-1.20 procedure.

This item was identified as a deficiency in that it appears to be a paper work problem, the materials QA and testing requirements of the purchase contract were met, there appears to be little threat to the health and safety of the public, and no undue expenditure of time or resources are required to implement corrective action.

6. Exit Interview

The inspector met with the licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on June 10, 1977. The inspector summarized the scope and findings of the inspection. The licensee acknowledged the deficiency identified in paragraph 5 and stated that the matter would be examined and corrective action taken as required.