

UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION II - SUITE 818
230 PEACHTREE STREET, NORTHWEST
ATLANTA, GEORGIA 30303

TELEPHONE: (404) 526-4503

In Reply Refer To:

RO:II:LEF
50-390/73-2
50-391/73-2
(999-39)

DEC 28 1973

Tennessee Valley Authority
Attn: Mr. J. E. Watson
Manager of Power
818 Power Building
Chattanooga, Tennessee 37401

Gentlemen:

This refers to the vendor inspection conducted by Mr. R. L. Brown of Region I, Regulatory Operations Office on October 25-26, 1973, at the Rotterdam Dockyard Company (RDM) plant located in Rotterdam, The Netherlands, relative to the fabrication of the Watts Bar Units 1 and 2 reactor pressure vessels authorized by AEC License Nos. CPPR-91 and CPPR-92 and to the discussions of our findings by Mr. Brown with Messrs. Knight and Catlin of your staff as well as Westinghouse and RDM management representatives at the conclusion of the inspection.

Areas examined during this inspection are described in the Regulatory Operations Inspection Report which is enclosed with this letter. 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 violations or safety items were observed.

One new unresolved item resulted from this inspection and is identified in Section III of the summary of the enclosed report.

We have also examined actions you have taken with regard to previously identified violations and unresolved items. The status of these items is identified in Sections II and IV of the summary of the enclosed report.

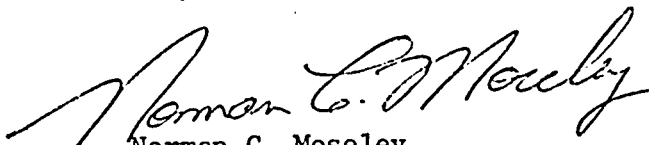
In accordance with Section 2.790 of the AEC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the AEC's Public Document Room. If this report contains any information that you believe to be

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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 enclosed report and this letter may then be placed in the Public Document Room.

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

Very truly yours,



Norman C. Moseley
Director

Enclosures:

RO Inspection Report Nos.
50-390/73-2 and
50-391/73-2
(999-39)

Letter to Tennessee Valley Authority
dated DEC 28 1973 50-390/73-2 - 50-391/73-2

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RO Inspection Report Nos. 50-390/73-2 and 50-391/73-2
(999-39)

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

Facility Name: Watts Bar Nuclear Facility, Units 1 and 2
Docket Nos.: 50-390 and 50-391
License Nos.: CPPR-91 and CPPR-92
Category: A2/A2

Location: Rotterdam Dockyard Company
Rotterdam, The Netherlands

Type of License: PWR-MW(e) 1160

Type of Inspection: Vendor, Announced

Dates of Inspection: October 25-26, 1973

Dates of Previous Inspection: April 16-17, 1973

Inspector-in-Charge: Ross L. Brown, Reactor Inspector, RO:I

Accompanying Inspector: None

Other Accompanying Personnel: None

Principal Inspector: L. E. Foster
L. E. Foster, Reactor Inspector, Facilities
Section, Facilities Construction Branch

12/27/73
Date

Reviewed by: W. A. Crossman
W. A. Crossman, Senior Inspector, Facilities Section
Facilities Construction Branch

12/27/73
Date

SUMMARY OF FINDINGS

I. Enforcement Action

A. Violation

None

B. Safety Items

None

II. Licensee Action on Previously Identified Enforcement Matters

A. Violations

Certain items appear to be in violation of 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Plants," as indicated below:

73-1-A1 Control and Audit of Purchased Equipment

Contrary to Criteria VII and XVIII, there was no evidence that the licensee has established an audit program that includes, detailed implementing procedures, checklists or frequency of audits for the TVA, Baden, Switzerland, office representative responsible for the inspection of the reactor pressure vessel being fabricated by the Rotterdam Dockyard Company (RDM). (Details, Paragraph 3)

B. Safety Items

None

III. New Unresolved Items

73-2/1 Design Review and Documentation

Documentary evidence was not available to determine if the reactor vessels are in conformance with the requirements of the ASME Code, Section III, 1973 Edition and including the Addenda through Winter of 1971. (Details, Paragraph 4)

IV. Status of Previously Reported Unresolved Items

A. Liquid Penetrant Examination of CRDM Canopy Seals

These areas are presently being examined to a procedure which is more restrictive than the standard acceptance criteria. This item is closed. (Details, Paragraph 5)

V. Design Changes

None

VI. Unusual Occurrences

None

VII. Other Significant Findings

A. Current Findings

WENESE is still maintaining a Resident Quality Assurance Engineer at the RDM Plant, contrary to that previously reported.

VIII. Management Interview

- A. The inspector conducted a meeting with the following management representatives at the conclusion of the inspection.

Persons Present

Tennessee Valley Authority (TVA)

J. P. Knight, Quality Assurance Manager
J. C. Catlin, Materials Engineer

RDM

W. N. Van de Poll, Manager Nuclear Engineering
P. Ester, Manager Quality Assurance
J. Laan, Quality Assurance Welding Engineer

WENESE

A. Chiandone, Quality Assurance, Resident Engineer

B. The following Items were discussed:

1. The inspector stated that RDM must review the design, material characteristics, non-destructive examination of base material and in-processing examination, welding and non-destructive testing procedures and qualifications pertinent to these vessels relative to upgrading to the ASME Code, Section III, 1971 Edition and including the Addenda through Winter of 1971.

The RDM management stated, that RDM will conduct such a review and will issue reports with necessary explanations as to acceptability of all activities, this document will be available for review during the next AEC audit. This is an unresolved item. (Details, Paragraph 4)

2. The licensee stated that TVA will review the present inspection program and will make necessary corrections to the program to comply with the requirements of 10 CFR 50, Appendix B. The licensee will submit the program, including the hold and witness points to Westinghouse as a contract requirement. The inspector apprised the licensee that this item will not be closed out until RO examines the final revised program. (Details, Paragraph 3)
3. The inspector explained the AEC procedure for handling the inspection reports prior to their placement in the Public Document Room.

DETAILS I

Prepared by: L. E. Foster for
R. L. Brown, Reactor Inspector

12/26/73
Date

Dates of Inspection: October 25-26, 1973

Reviewed by: L. E. Foster for
W. A. Crossman, Senior Inspector
Facilities Section, Facilities
Construction Branch

12/26/73
Date

1. Persons Contacted

Tennessee Valley Authority (TVA)

J. P. Knight, Quality Assurance, Manager
J. C. Catlin, Materials Engineer

WENESE

A. Chiandone, Quality Assurance, Resident Engineer

RDM

J. Olierook, Administration, Quality Control Records
J. Laan, Welding Engineer, Quality Control
T. Ester, Manager, Quality Assurance

2. General

These vessels are scheduled to ship in September 1974.

3. Control and Audit of Purchased Equipment

The licensee stated that the result of their recent audit of the RDM and WENESE facilities, indicates that the QA Program referenced in their letter dated July 6, 1973, in response to the AEC RO:II letter dated June 6, 1973, does not comply with requirements of 10 CFR 50, Appendix B and the program will be reviewed and revised as necessary.

The licensee also stated that the QA Program for the TVA representative at the RDM Plant will be reviewed and the necessary revisions will be made to ensure compliance. This document will be completed by December 15, 1973, and will be transmitted to Westinghouse as a contract requirement. RO will examine these items during subsequent inspections.

4. Design Review and Documentation

WENESE has issued a purchase change order which requires the reactor vessels to be upgraded to the requirements of the ASME Code, Section III, 1971 Edition and including the Addenda through Winter of 1971.

RDM does not have adequate documentary evidence to determine that a complete and accurate review has been made to verify that all quality aspects of the vessels are in conformance with the later code requirements.

The RDM Management stated that a review will be made and a report written that will include the necessary explanations as to the acceptability of all quality activities. This item is unresolved and will be examined during subsequent inspections.

5. Liquid Penetrate Examination of CRDM Canopy Seal Lips

The inspector reviewed the procedure for liquid penetrate examination of Canopy Seal Lips No. 24.10-1 which requires an examination in accordance with the standard liquid penetrant procedure, except the RDM acceptance criteria is more stringent than the standard and also requires all indications exceeding 1/64 of an inch to be charted and reported. The inspector has no further questions on this item.

6. Record Review

The inspector audited the following records which were selected on a random basis and reviewed in detail.

a. Unit One

Quality Assurance Plans spread sheet, clad chemistry reports, variation notices, and deviation reports.

b. Unit Two

Welds History Reports (Welds C08, W05, W16), variation notices, deviation reports and quality assurance plans spread sheets.

No violations to the ASME Code or customer specifications were identified during this audit.

7. Observation At Work

During the shop tour the inspector observed welding in progress and machining operations and no violations or non-conformance were identified.