

Central File
50-259/76-17
50-26076-17



650 POWER BUILDING
TENNESSEE VALLEY AUTHORITY
CHATTANOOGA TENNESSEE 37401

August

50-259/76-17

Mr. Norman C. Moseley, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 818
230 Peachtree Street, NW.
Atlanta, Georgia 30303

Dear Mr. Moseley:

This is in response to F. J. Long's August 5, 1976, letter,
IE:II:RFS 50-259/76-17, 50-260/76-17, which transmitted
for our review an IE Inspection Report (same number).
We have reviewed that report and do not consider any
part of it to be proprietary.

Very truly yours,

J. L. Gilleland
Assistant Manager of Power



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

AUG -5 1976

In Reply Refer To:

IE:II:RFS

50-259/76-17

50-260/76-17

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 Messrs. F. S. Cantrell and R. F. Sullivan of this office on July 7-9 and 20-21, 1976, of activities authorized by NRC Operating License Nos. DPR-33 and DPR-52 for the Browns Ferry Units 1 and 2 facilities, and to the discussion of our findings held with Mr. H. J. Green 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 examination 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.

An infraction identified through your internal audit program is shown in the details of the enclosed inspection report. The appropriate report was made and corrective action initiated or completed and no additional information is needed for this item at this time.

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 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

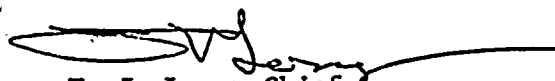
Tennessee Valley Authority

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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 letter, we will be glad to discuss them with you.

Very truly yours,



F. J. Long, Chief
Reactor Operations and Nuclear
Support Branch

Enclosure:

IE Inspection Report Nos.

50-259/76-17 and 50-260/76-17

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



IE Inspection Report Nos. 50-259/76-17 and 50-260/76-17

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

Facility Name: Browns Ferry 1 and 2
Docket Nos.: 50-259 and 50-260
License Nos.: DPR-33, DPR-52

Location: Limestone County, Alabama

Type of License: 3293 Mwt, BWR (GE)

Type of Inspection: Routine, Unannounced

Dates of Inspection: July 7-9 and 20-21, 1976

Dates of Previous Inspection: June 19, 1976

Inspectors-in-Charge: F. S. Cantrell, Reactor Inspector
Reactor Projects Section No. 1
Reactor Operations and Nuclear Support Branch
(July 7-9, 1976)

R. F. Sullivan, Reactor Inspector
Reactor Projects Section No. 1
Reactor Operations and Nuclear Support Branch
(July 20-21, 1976)

Accompanying Inspector: None

Other Accompanying Personnel: None

Principal Inspector: R. F. Sullivan
R. F. Sullivan, Reactor Inspector
Reactor Projects Section No. 1
Reactor Operations and Nuclear Support Branch

8/5/76
Date

Reviewed by: H. C. Dance
H. C. Dance, Chief
Reactor Projects Section No. 1
Reactor Operations and Nuclear Support Branch

8/5/76
Date

SUMMARY OF FINDINGS

I. Enforcement Items

None

II. Licensee Action on Previously Identified Enforcement Matters

Not inspected.

III. New Unresolved Items

None

IV. Status of Previously Reported Unresolved Items

Not inspected.

V. Unusual Occurrences

None

VI. Other Significant Findings

None

VII. Management Interview

The results of the inspection presented in the details of this report were discussed with Mr. Green and members of his staff on July 9 and 21.

DETAILS I

Prepared by:

R F Sullivan
R. F. Sullivan, Reactor Inspector
Reactor Projects Section No. 1
Reactor Operations and Nuclear
Support Branch

8/5/76
Date

Dates of Inspection: July 20-21, 1976

Reviewed by:

H C Dance
H. C. Dance, Chief
Reactor Projects Section No. 1
Reactor Operations and Nuclear
Support Branch

8/5/76
Date

1. Persons Contacted

H. J. Green - Plant Superintendent
J. F. Groves - Acting Assistant Plant Superintendent
J. B. Studdard - Operations Supervisor
R. Hunkapiller - Assistant Operations Supervisor
T. G. Campbell - DPP Outage Director
J. C. Mewbourne - Assistant Shift Engineer
E. G. Thornton - Assistant Shift Engineer

2. Unit 1 Fuel Reloading

The reloading of Unit 1 reactor was still in progress during this inspection visit and selected phases were observed by the inspector on both day and night shifts. Minor delays were being encountered with equipment problems on the refueling floor but they had no affect on safety of fuel handling. By the end of the inspection on July 21, 1976, 659 of the 764 fuel bundles had been loaded in the core.

No deficiencies in the loading operations were noted by the inspector.

3. Unit 2 Core Verification

The inspector reviewed results of the core verification check which was performed in accordance with step 6.2.14 in the fuel loading procedure, SRI/3. Underwater TV was used to make a tape record of fuel bundle locations and orientations. When plant results personnel examined the tape on July 13, 1976, they discovered a loading error. The positions of fuel bundles TZ622 and TZ456, two diagonally adjacent fuel bundles, were reversed. The error was reported to

plant management and was formally investigated. PORC reviewed the incident and concurred in the conclusion that the existing safety analysis covered such an error and that no new safety consideration resulted. A special procedure was prepared, reviewed and approved to correct the error which was accomplished without difficulty.

The inspector reviewed records and had discussions which confirmed that the internal review system performed in accordance with requirements. Corrective action included contacts with fuel handlers and supervisors to reemphasize the importance of positive verification of location and orientation.

The inspector stated that he considered the loading error a failure to adhere to the loading procedure, which included an independent verification, to be contrary to Technical Specification 6.3.A.2 and that he further considered this matter a licensee identified non-compliance item.

4. Outage Organization For Modifications

An outage organization has been established at the Browns Ferry facility to be responsible for the overall supervision, planning and scheduling, and QA surveillance for modification and addition activities which take place following fire restoration. The fire restoration outage organization is being phased out although certain of the personnel are being transferred to the permanent outage organization which will report to the plant superintendent. Those outstanding commitments from the 'Recovery Plan' are carried on the current scheduling list with identified due dates which includes those required to be completed prior to operation and those prior to the first refueling outage.

The same items are also carried on the Master Exception List maintained by QA and reviewed by PORC prior to going to a new step or phase in operation.

Other commitments falling in the category of non-hardware items such as new procedures, administrative controls and training requirements, as well as minor maintenance items, are also included on the Master Exception List. The inspector concluded that TVA had provided sufficient internal controls to give assurance that required commitments would be fulfilled on a timely basis.

DETAILS II

Prepared by:

F. S. Cantrell, Reactor Inspector
Reactor Projects Section No. 1
Reactor Operations and Nuclear
Support Branch

7/29/76
Date

Dates of Inspection: July 7-9, 1976

Reviewed by:

H. C. Dance, Chief
Reactor Projects Section No. 1
Reactor Operations and Nuclear
Support Branch

8/5/76
Date

1. Persons Contacted

Tennessee Valley Authority (TVA)

H. G. Green - Plant Superintendent
G. Dewease - Assistant Plant Superintendent
R. Hunkapiller - Assistant Operations Supervisor
J. Pitman - Instrument Superintendent
W. E. Brown - Assistant Shift Engineer
L. L. Kenndy - Shift Engineer
J. Cox - Operations Superintendent
A. Pedersen - Startup Engineer

2. Fuel Loading

Fuel loading operations for Units 1 and 3 were observed both on the refueling floor and in the control rooms at various times on the day shift on July 7, 8 and 9, and on the evening shift July 8 to verify compliance with technical specifications and fuel loading procedures. No items of noncompliance were identified; however, one weakness was identified in that the door to the roof of the reactor building is not locked (to prevent locking someone on the roof) and this area is not checked for occupancy prior to making the subcriticality check that is required periodically while loading new fuel to Unit 3. (The fuel loading procedure requires all personnel to be off the refueling floor during subcriticality checks). The plant superintendent stated in the exit interview that the necessary controls would be established to assure control of access to the rod during subcriticality checks.

3. Vent Hole In Core Spray Header

The inspector asked if a vent hole had been added to the core spray header based on a recommendation from GE to eliminate a potential pipe cracking problem. The GE operations superintendent stated that core spray pattern test confirmed that a vent hole had been drilled at the high point of the core spray headers between the shroud and the reactor vessel for Unit 3. A record search is in progress to determine if Units 1 and 2 core spray headers had similar vents.