

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

APR 23 1984 P12:25

April 16, 1984

U.S. Nuclear Regulatory Commission
Region II
ATTN: James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

Enclosed is our response to R. C. Lewis' March 14, 1984, letter to H. G. Parris transmitting Inspection Report Nos. 50-259/83-60, -260/83-60, -296/83-60 regarding activities at our Browns Ferry Nuclear Plant which appeared to have been in violation of NRC regulations. On April 13, 1984, Mike Hellums of my staff and Ross Butcher of your staff discussed a one-day extension to April 16, 1984 for submitting our response, except for Violation 2, which will be submitted on May 14, 1984. We have enclosed our response to the Notice of Violation, minus the response to Violation 2 which will be submitted on May 14. If you have any questions, please call Jim Domer at FTS 858-2725.

To the best of my knowledge, I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

D S Kammer

D. S. Kammer
Nuclear Engineer

Enclosure

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RESPONSE - NRC INSPECTION REPORT NOS.
50-259/83-60, 50-260/83-60, AND 50-296/83-60
RICHARD C. LEWIS'S LETTER TO H. G. PARRIS
DATED MARCH 14, 1984

Item 1 (259/83-60-05)

10 CFR 50, Appendix B, Criterion V requires that activities affecting quality shall be prescribed by documented instructions and procedures. The plant clearance procedure (Standard Practice 14.25) for tagout of equipment specifies requirements to be followed in placing equipment in and out of service.

Contrary to the above, the requirements of BF 14.25 were not met in that tagout clearance procedures were not followed for placing the root valve for pressure transmitter 64-137 and 64-138 back in service on October 18, 1983, on clearance 83-1232. The operator assigned to return the system to service did not place the valve in the open position and did not remove the tag attached to the valve. This resulted in the drywell to torus instrumentation being out of service during power operation. Additionally, the valve was not verified open during pre-startup valve lineups. The valve was found mispositioned 5 days after unit startup during a routine surveillance.

This is a Severity Level IV Violation (Supplement I) applicable to unit 1.

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

This was personnel error in that the operator failed to return the valve which was identified on the clearance sheet to the required position as the system was returned to service.

3. Corrective Steps Which Have Been Taken and the Results Achieved

Disciplinary action was taken against the operator involved and the error has been discussed with operations personnel both on shift and in training.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations

The clearance procedure (Standard Practice 14.25) has been revised to include two-party verification on return to service of safety or safety-related systems when a clearance is released to prevent further problems.

5. Date When Full Compliance Will Be Achieved

Full compliance was achieved February 3, 1984, when the procedure revision was issued.

Item 3

Technical Specification 6.3.A.1 requires that detailed written procedures be prepared, approved and adhered to related to plant startup and operation.

Contrary to the above, the requirement was not met in that:

- A. Operating Instruction 64 (Primary Containment System Startup Checklists and Valve Lineups) was found to be inadequate since it does not include the instrument isolation valves for the drywell and torus pressure sensing lines connected to pressure transmitters PDT 64-137 and PDT 64-138. Failure to have one of these valves in service resulted in both of the drywell to torus differential pressure instruments being out of service during power operation.
- B. General Operating Instruction 100-1 (Pre-startup Checklists) required that all chart recorders on panel 9-3 be placed in service prior to startup of Unit 1 on December 24, 1983. The recorder's torus pressure indicating circuit remained deenergized until January 10, 1984.

This is a Severity Level IV Violation (Supplement I) applicable to all units.

Item 3A (259, 260, 296/83-60-03)

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

The valve was not shown on primary flow drawings or on instrument panel drawings which are used to develop checklists. The torus contractor provided original drawings of torus penetrations.

3. Corrective Steps Which Have Been Taken and the Results Achieved

As-constructed status of all torus instrument lines has been verified by walkdown. In addition, an independent walkdown to verify reactor protection system instrumentation lines has been performed.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations

The valves identified by the status verification walkdowns have been added to the necessary instrument checklists. Any other drawing discrepancies found during these reviews are being corrected.

5. Date When Full Compliance Will Be Achieved

Full compliance was achieved on February 23, 1984, when the checklists were revised to include isolation valves for PDT 64-137 and -138.

Item 3B (259/83-60-03)

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

The recorder was found to be turned off. It was expected that the recorder was defective, but when the recorder was turned on, it operated properly. The procedure did not identify an action to take in the event of an inoperable recorder.

3. Corrective Steps Which Have Been Taken and the Results Achieved

The instrument section made additional checks of all control room recorders to ensure needed repairs were made for four weeks. Also, an information notice was sent to all operators on January 13, 1984, to ensure proper maintenance and operation of recorders.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations

A revision will be made to the instruction to notify the shift engineer when inoperable recorders are identified in the prestartup checks for determination of system operability.

5. Date When Full Compliance Will Be Achieved

Full compliance will be achieved by June 30, 1984.

Item 4 (259/83-60-02)

Technical Specification 3.6.8.3 requires that at steaming rates greater than 100,000 lb/hr., the reactor water quality chloride maximum limit of 0.5 ppm shall not be exceeded. Exceeding this limit shall be cause for placing the reactor in the cold shutdown condition.

Contrary to the above, this requirement was not met in that reactor water quality chloride exceeded 0.5 ppm from 0320 a.m. to 11:40 a.m. on December 31, 1983, without any action being taken to commence an orderly shutdown. An orderly shutdown was initiated at 12:20 p.m., December 31, 1983, due to water quality being out of specification and possible resin intrusion. Operational supervisory personnel were not made aware of the chloride out of specification condition until 11:05 a.m., December 31, 1983. An orderly shutdown was terminated at 2:35 p.m. after chloride concentration was confirmed to be within specification and the suspected source isolated.

This is a Severity Level IV Violation (Supplement I) applicable to Unit 1.

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

A miscommunication between chemistry laboratory personnel and operations personnel regarding unit status resulted in confusion which delayed the shutdown initiation. Failure of the chemistry laboratory analyst to report the out-of-specification chloride condition to the shift engineer enhanced the problem.

3. Corrective Steps Which Have Been Taken and the Results Achieved

A critique of the event was held with all chemistry laboratory personnel. The following points were discussed: A chronology of the event, the need to communicate out-of-specification conditions to the shift engineer, the need to consult technical specifications and surveillance instructions for actions required in response to an out-of-specification condition, and the need to develop a better method to define unit status such that technical specification requirements are correspondingly clarified. A method for defining unit status by chemistry laboratory personnel has been developed.

4. Corrective Steps Which Will Be Taken To Avoid further Violations

No further corrective action is required.

5. Date When Full Compliance Will Be Achieved

Full compliance was achieved January 16, 1984.

Item 5 (259, 260, 296/83-60-04)

10 CFR 50, Appendix B, Criterion V requires that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to the above, this requirement was not met in that Mechanical Instruments and Controls drawing 47W600-133 incorrectly showed the instrument lines between the drywell and torus to transmitters PT-64-135 and PDT-64-137. These lines were found reversed from the drawing indication during a resident inspector walkdown of the system. System operation was not impaired as the installation was correct with only the drawing in error.

This is a Severity Level V Violation (Supplement I) applicable to all units.

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

The original drawing was in error. The drawing error had been independently identified by TVA and proper corrective action had been undertaken.

3. Corrective Steps Which Have Taken and the Results Achieved

A category "D" field change request (number 3290) was written and engineering change notice (ECN) P5063 was written by the Division of Engineering Design.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations

Drawing 47W600-133 will be revised by means of a workplan when ECN P5063 has been received at the plant.

5. Date When Full Compliance Will Be Achieved

Full compliance will be achieved by November 1, 1984.