

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

August 1, 1984

U.S. Nuclear Regulatory Commission
Region II
ATTN: James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

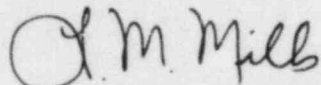
Dear Mr. O'Reilly:

Enclosed is our supplemental response to R. C. Lewis' July 12, 1984 letter to H. G. Parris regarding Items 4a, 5, and 7 of Inspection Report Nos. 50-259/84-15, 50-260/84-15, 50-296/84-15 for the Browns Ferry Nuclear Plant. 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



L. M. Mills, Manager
Nuclear Licensing

Enclosure

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ENCLOSURE
SUPPLEMENTAL RESPONSE
NRC INSPECTION REPORT NOS. 50-259/84-15,
50-260/84-15, AND 50-296/84-15

Item No. 4.a.

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.

- a. Contrary to the above, this requirement was not met in that control air system as-constructed drawings 47W847-9, -10, and -11 do not reflect the control air systems in the plant. On unit 1 valve 1-32-1278, isolation to PC-68-106, is not on the drawing. Isolation valve to FCV-70-1 is labeled 1-32-2554 in the plant, but is not numbered on the drawing. Isolation valve to FCV-68-106 is labeled 1-32-1279, but is not numbered on the drawing. On unit 2, differences between plant valve identification tags and the drawings are 1278 (plant) versus 2121 (drawing), 1279 (plant) versus 2122 drawing, 1894 (plant) versus no number (drawing), no label (plant) versus 2133 (drawing), 1397 (plant) versus 2132 (drawing), and 1781 (plant) versus 2139 (drawing). On unit 3, the drawing does not show the valve between 2121, 2122, and 696, 2322. Valve 2133 on the drawing is not labeled in the plant.

1. Admission or Denial of the Alleged Violation

Browns Ferry admits the violation as stated.

2. Reasons for the Violations if Admitted

The control air system was originally field fabricated and installed without adequately approved drawings. A number of valves installed in the system were subsequently not identified for inclusion on system drawings.

3. Corrective Steps Which Have Been Taken and Results Achieved

A total system walk-down is being performed by plant personnel for the control air system flow diagrams to reflect the as-constructed status. Drawings are being developed for approval to reflect the as-constructed status from marked up drawings during the system walk-down. System walk-down is complete and drawings are marked up and waiting for Engineering Design to issue Engineering Change Notice for unit 1. System walk-down is complete for all accessible areas (areas not complete are drywell, steam vault, offgas recombiner room, and moisture separator room) and the drawing markup is 75 percent complete on unit 2. The system walk-down is complete and the drawing markup is 50 percent complete for unit 3.

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

A complete walk-down and drawing mark up is being performed for the unit 1, 2, and 3 control air system. Accessible portions of this system have been walked down, drawings are being as-constructed, and a schedule is being developed for inspection of inaccessible portion of each unit. Completion of this program will prevent further violations. Expansion of this effort to include other systems is being considered under the Regulatory Performance Improvement Program.

5. Date When Full Compliance Will Be Achieved

Full compliance will be achieved by June 1, 1985.

Item No. 5

Technical Specification 6.3.A.6 requires that detailed written procedures for surveillance and testing requirements be prepared, approved, and adhered to. Technical Specification 4.11.A.1.g requires that a fire protection building hydraulic performance verification be performed triannually.

Contrary to the above, the requirement was not met in that Surveillance Instruction 4.11.A.1.g was inadequate to assure that reactor building hydraulic performance was as described in the fire protection system design basis, the post modification test (PT-13-1) or the Browns Ferry Fire Recovery Plan, Part X, Section A of 1976.

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

1. Admission or Denial of the Alleged Violation

TVA admits a violation occurred with clarification as described in item 2.

2. Reasons for the Violations if Admitted

Technical Specification 4.11.A.1.g does require a building hydraulic performance verification be performed triannually. Technical Specification 3.11.A.9 requires that the fire protection system be capable of supplying the individual loads listed in Table 3.11.A. Surveillance Instruction 4.11.A.1.g adequately assures that the individual systems are capable of supplying the individual loads listed in Table 3.11.A. Therefore, detailed written procedures for surveillance and testing requirements were prepared, approved, and adhered to which met the requirements of Technical Specifications 3.11.A.9, 4.11.A.1.g, and 6.3.A.6.

However, TVA does admit that the flows listed in Table 3.11.A do not meet the commitment contained in the Browns Ferry Fire Recovery Plan, Part X, Section A, Revision 6, Page 41, paragraph 5.2.1.2(8) which states 'the piping will be hydraulically designed to provide the pressure necessary at the nozzles to supply the water density specified in (1) above with 1-1/2-inch hose connection being used simultaneously.'

3. Corrective Steps Which Have Been Taken and Results Achieved

A Special Test (ST 8409 R1) was conducted to verify that the piping will provide the pressure necessary at the nozzles to supply the water density specified in the Browns Ferry Fire Recovery Plan, Part X, Section A, Revision 6, Page 40, Paragraph 5.2.1.2(1) with one 1-1/2-inch hose connection being used simultaneously. All fixed cable tray water spray systems passed ST 8409 R1.

Browns Ferry Standard Practice BF 14.15 requires plant superintendent approval before removing from service any component which renders a fire protection system incapable of performing its intended function in its intended manner for any reason other than testing or unless the condition of the protected equipment is such that fire protection is not required. Water-spray sprinkler, or fire hose systems may be removed from service for a period not to exceed one hour for testing or servicing. If the testing or servicing of the system are to exceed one hour, immediate steps must be taken to establish an appropriate fire watch.

This requirement ensures that the water-spray systems will remain in service or that appropriate procedures will be followed if a system must be taken out of service for any reason.

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

TVA will conduct a design study to reevaluate the design basis, the required flow and pressures, the required testing frequencies, and the adequacy of test locations for the fixed cable tray water-spray systems installed in accordance with the Browns Ferry Fire Recovery Plan. Table 3.11.A and Surveillance Instruction 4.11.A.1.g. will be revised based on the results of the design study.

5. Date When Full Compliance Will Be Achieved

Full compliance will be achieved by March 2, 1985.

Item 7

10 CFR 50, Appendix B, Criterion X requires that a program for inspection of activities affecting quality shall be established and executed to verify conformance with documented instructions, procedures, and drawings for accomplishing the activity.

Contrary to the above, the requirement was not met as related to Mechanical Maintenance Instruction (MMI) 125 (Inspection, Testing, and Maintenance of Monorail Systems, Underhung Cranes, and Overhead Hoists) and MMI-130 (Mobile Cranes and Forklifts, Inspection, Testing, and Preventive Maintenance) as indicated by the examples below:

- a. MMI-125 requires a periodic inspection of monorail systems, underhung cranes, and hand chain-power overhead hoists to be conducted on idle (over 6-months) equipment. No evidence was available for review to indicate this inspection was being scheduled or completed as required.
- b. MMI-125, Appendix 2, requires a frequent (not defined) inspection be conducted on hand-powered overhead hoists. The hooks are to be checked to ascertain the hook throat opening was not more than 15 percent greater than normal throat opening. The procedures did not specify the normal throat opening and no evidence the inspection had even been conducted was available for review. Several mechanical engineers/technicians interviewed did not know what the normal throat opening would be for various size hooks. The procedure specifically deleted any data sheet requirements.
- c. MMI-130 requires wire rope inspection to include a check for proper rope reeving. The reeving of individual cranes was not listed in the procedure or known by mechanical craft personnel.
- d. MMI-130, data sheet 7, monthly wire rope inspection, is inconclusive on required signoff (one yes/no signoff for determinants, step 1.c.) and does not address a signoff for each requirement in the procedure text. (No signoff to verify rope reeving.)

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

1. Admission or Denial of the Alleged Violation

TVA admits to the violation as stated.

2. Reasons for the Violation if Admitted

Inadequate procedures were the reason for this violation.

3. Corrective Steps Which Have Been Taken and Results Achieved

A crane engineering specialist reviewed all the items inspected by MMI-125 and -130 instructions and found the equipment to be non-critical components. MMI-125 and -130 were completely rewritten and issued as mechanical maintenance guidelines (2301 and 2302) since they cover noncritical equipment.

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

The guidelines will serve as inspection and documentation of these inspections for all noncritical lifting equipment. The reactor building crane and the refuel platform bridge crane are the only two pieces of CSSC lifting equipment. MMI-117 defines inspections to be performed on reactor building crane; MMI-34 inspects the refuel platform crane for proper operability before use. MMI-119 contains administrative controls for the proper use of all lifting devices for handling heavy loads. The items will also be incorporated into the computerized preventive maintenance program to avoid further violations.

5. Date When Full Compliance Will Be Achieved

Full compliance was achieved on July 16, 1984 as stated in the original response.