

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

82 OCT 1 P 1: 59

September 28, 1982

U.S. Nuclear Regulatory Commission
Region II
ATTN: James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

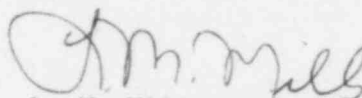
Dear Mr. O'Reilly:

Enclosed is our response to R. C. Lewis' August 30, 1982 letter to H. G. Parris transmitting Inspection Report Nos. 50-259/82-23, -260/82-23, -296/82-23 regarding activities at our Browns Ferry Nuclear Plant which appeared to have been in violation of NRC regulations. We have enclosed our response to Appendix A, Notice of Violation. 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

8211150344 821021
PDR ADOCK 05000259
Q PDR

RESPONSE - NRC INSPECTION REPORT NOS.
50-259/82-23, 50-260/82-23, AND 50-296/82-23
R. C. LEWIS' LETTER TO H. G. PARRIS
DATED AUGUST 30, 1982

Appendix A

Item - (259, 260, 296/82-23-03)

10CFR50, Appendix B, criterion V, as implemented by TVA's OA Topical Report, TVA-TR-75-1, requires activities affecting quality be prescribed by procedures appropriate to the circumstance and accomplished in accordance with those procedures.

Contrary to the above, the requirement for procedures appropriate to the circumstances was not met prior to July 30, 1982, in that Surveillance Instruction 4.7.C, Secondary Containment, did not account for inleakage to the secondary containment zone under test that results from operation of the normal reactor building ventilation system in adjacent secondary containment zones. This condition allowed masking of the true inleakage to the secondary containment zone under test.

This is a licensee identified violation.

This is a Severity Level IV Violation (Supplement I).

1. Admission or Denial of the Alleged Violation

TVA admits the violation occurred as stated.

2. Reasons for the Violation if Admitted

The design of the 3-unit facility at Browns Ferry provides for the isolation of the entire reactor building or each of the four individual zones which comprise the building. There is a reactor zone for each unit and a common refueling zone. The instruction, written to show compliance with Technical Specification 4.7.C., showed versatility to allow testing of the building or selected zones. Tests performed at the beginning of a refueling outage were conducted on the refueling zone and the outage unit's reactor zone. This was the preferred test method to lessen the potential for an inadvertent shutdown of the operating units. Performance of any secondary containment test

requires initiation of the standby gas treatment system. This causes isolation of the normal ventilation system for the zones being tested. For an operating unit, this loss of ventilation causes main steam tunnel temperatures to increase toward the isolation setpoint. This isolation in turn causes a reactor scram.

Zone testing an outage unit does not affect the ventilation system operation on the operating units. Because the normal ventilation system maintains a negative pressure on its associated zone, this negative pressure can affect the results of a secondary containment test on an adjacent zone. The potential effect depends on the integrity of the zone interfaces. Personnel associated with the secondary containment testing did not realize the potential nonconservative effect of adjacent ventilation system operation and consequently did not provide for control of this variable or allowance for its effect.

During the performance of the procedure in July and August 1982, the difficulties initially encountered were thought to be associated with flow measuring techniques and instruments. Continued investigation using the zone versatility contained in the procedure revealed one large and several small breaches in secondary containment integrity as well as interzone leakage paths. It was during this series of intensive tests that the potential effect of associated ventilation system operation was first indicated. We wish to point out that, even though a variable which could affect the test results in a nonconservative direction was not controlled, the test conducted in July and August did adequately identify the breach of secondary containment that existed.

3. Corrective Steps Which Will Be Taken and the Results Achieved

Once the potential effect of the normal ventilation system was recognized, the test procedure was revised accordingly. Now, if zone testing is selected to prove secondary containment integrity, associated zone ventilation system effects are evaluated. All leakage pathways identified during tests performed in July and August were repaired. The revised procedure was performed August 8 and 9 and secondary containment integrity was proven to be well within technical specification limits.

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

No further actions are required.

5. Date When Full Compliance Will Be Achieved

Full compliance was achieved on August 9, 1982 with the successful performance of the revised test procedure.