

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

APR 08 1988

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of)	Docket Nos.	50-259
Tennessee Valley Authority)		50-260
			50-296

BROWNS FERRY NUCLEAR PLANT (BFN) - UNITS 1, 2, AND 3 - NRC INSPECTION REPORT
NOS. 50-259/87-46, 50-260/87-46, AND 50-296/87-46, - RESPONSE TO NOTICE OF
VIOLATION

This letter provides TVA's response to your letter from K. P. Barr to
S. A. White dated February 26, 1988, which transmitted the subject report.
The report cited TVA with a violation of technical specifications.

Enclosure 1 provides TVA's response to the violation. Enclosure 2 provides a
list of commitments. An extension to the due date for this response to
April 10, 1988, was agreed to by A. Ignatonis of your staff on April 1, 1988.

If you have any questions, please telephone Carrull McFall at (205) 729-2046.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. Gridley
R. Gridley, Director
Nuclear Licensing and
Regulatory Affairs

Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

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cc (Enclosures):

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ENCLOSURE 1

RESPONSE
NRC INSPECTION REPORT
NOS. 50-259/87-46, 50-260/87-46, AND 50-296/87-46
LETTER FROM K. P. BARR TO S. A. WHITE
DATED FEBRUARY 26, 1988

Violation

Technical specification (TS) 4.7.B.2.a requires that halogenated hydro-carbon (freon) removal efficiency of the standby gas treatment system (SGTS) be demonstrated to be greater than or equal to 99% by the test methods of the American National Standards Institute (ANSI) N510-1975 following significant painting, fire or chemical release in a zone communicating with the system.

Contrary to the above, the test performed on SGTS train B November 25, 1987, to satisfy this requirement following a fire in the unit 2 drywell did not comply with ANSI N510-1975 in the following examples:

Example 1

The freon gas generator output was not held to $\pm 20\%$ of the preset value as specified in step 12.4.3 of ANSI N510-1975.

1. Admission or Denial of the Alleged Violation

TVA admits this example of the violation.

2. Reasons For the Violations

A review of past revisions to technical instruction 17B which implemented the technical specification 4.7.B.2.a testing requirements revealed that the requirement to maintain the freon gas generator output to within ± 20 percent of the preset value was erroneously deleted in 1985.

3. Corrective Steps Which Have Been Taken and Results Achieved

SGTS system train B was declared inoperable on December 7, 1987. Technical instruction 17B was revised to require that the freon gas generator output be maintained within ± 20 percent of the preset value. A retest of train B was started on December 8 and completed on December 10, 1987. Test results indicated satisfactory filter installation.

A review of the procedures for testing high efficiency particulate air (HEPA) and charcoal filters was performed to ensure all ANSI N510-1975 requirements are being satisfied. It was determined from this review that minor procedural changes are necessary to better document compliance with the ANSI N510-1975 requirements.

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

TVA management has already recognized that there is a generic problem with deficient surveillance instructions. A surveillance instruction upgrade program is currently underway at BFN as described in the TVA Nuclear Performance Plan Volume 3, Section 2.5.0. The upgraded surveillance instructions for HEPA and charcoal filter testing will be issued under that program by June 17, 1988. As part of the upgrade, technical instruction 17B will be incorporated into the surveillance instructions along with the minor procedural changes necessary to better document compliance with ANSI N510-1975.

5. Date When Full Compliance Will Be Achieved

June 17, 1988

Example 2

The upstream concentration of freon tracer gas was not limited to 20 ppm as specified in step 12.4.3 of ANSI N510-1975.

1. Admission or Denial of the Alleged Violation

TVA admits this example of the violation.

2. Reasons For the Violation

A review of past revisions to technical instruction 17B which implemented the technical specification 4.7.B.2.a testing requirements revealed that the recommendation to maintain the upstream concentration of freon tracer gas to no more than 20 ppm was erroneously deleted in 1985.

3. Corrective Steps Which Have Been Taken and Results Achieved

Technical instruction 17B was revised to add the recommendation to maintain the upstream concentration of freon tracer gas to no more than 20 ppm.

When compliance with the requirements of ANSI N510-1975 was questioned following the November 25, 1987 testing, the test equipment vendor was contacted for clarification. He stated that the recommendation in ANSI N510-1975, paragraph 12.4.3 was based on the limitations of test equipment at that time. Gas chromatographs were used to measure tracer gas breakthrough in the 1975 timeframe. Upstream and downstream tracer gas concentrations could not be taken simultaneously. If an upstream concentration of greater than 20 ppm was used, it could cause tracer gas breakthrough to occur too quickly so that the downstream concentration could not be accurately determined.

The halide detectors now in use, however, read upstream and downstream concentrations simultaneously. The accuracy of downstream readings is no longer dependent on upstream concentrations within the limitation of the detectors.

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

For the reasons stated above, on future tests the 20 ppm upstream concentration limitation will be considered as a recommendation which can only be exceeded with the approval of the cognizant plant engineer responsible for performance and review of this SI. The upgraded surveillance instructions for HEPA and charcoal filter testing, which will be issued by June 17, 1988, will clarify the allowable upstream concentration of freon tracer gas in order to prevent confusion over this matter in the future.

5. Date When Full Compliance Will Be Achieved

June 17, 1988

ENCLOSURE 2

NRC INSPECTION REPORT
NOS. 50-259/87-46, 50-260/87-46, AND 50-296/87-46
LETTER FROM K. P. BARR TO S. A. WHITE
DATED FEBRUARY 26, 1988

LIST OF COMMITMENTS

1. Technical instruction 17B was revised to require that the freon gas generator output be maintained within ± 20 percent of the preset value and to add the recommendation to maintain upstream tracer gas concentration to no more than 20 ppm.
2. The upgraded surveillance instructions for HEPA and charcoal filter testing will be issued by June 17, 1988. As part of this upgrade, technical instruction 17B will be incorporated into the surveillance instructions, minor procedural changes necessary to better document compliance with ANSI N510-1975 will be made, and the allowable upstream concentration of freon tracer gas will be clarified.