



Tennessee Valley Authority, P.O. Office Box 2000, Decatur, Alabama 35609

November 24, 1997

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
SECONDARY CONTAINMENT LEAK RATE TEST REPORT**

This letter provides the periodic special report for the BFN Secondary Containment Leak Rate (SCLR) test required by Technical Specification 6.9.2.8. The SCLR test was performed on September 27, 1997, in preparation for the Unit 2 Cycle 9 refueling outage. The overall leak rate was 9,239 cubic feet per minute (cfm). This leak rate was below the allowable limit of 12,000 cfm specified by Surveillance Requirement 4.7.C.1.a. The specific test parameters are provided in the enclosure.

There are no commitments contained in this letter. If you have any questions regarding this report, please contact me at (205) 729-2636.

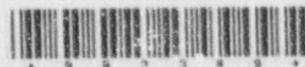
Sincerely,

T. E. Abney
 T. E. Abney
 Manager, Licensing
 and Industry Affairs

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Enclosure
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Enclosure

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ENCLOSURE

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3
SECONDARY CONTAINMENT LEAK RATE (SCLR) TEST REPORT

1.0 Report

BFN SCLR Test Report, per Technical Specification (TS) 6.9.2.8.

2.0 Purpose

This report describes the results and analysis of the test data taken during the September 27, 1997, leak rate testing of the BFN secondary containment. This report satisfies the reporting requirements of TS 6.9.2.8.

3.0 Procedure

Surveillance Instruction (SI) 0-SI-4.7.C-1, Combined Zone Secondary Containment Integrity Test, outlines the procedures followed during the SCLR test.

4.0 Data

The SI was performed in a combined zone configuration. The following data was measured during the test:

1. Standby Gas Treatment System Flow Rate: 9,239 cubic feet per minute (cfm)

Refueling Zone	5,420 cfm
Reactor Zones	3,819 cfm

2. Reactor Building Differential Pressures:

Unit 1 Reactor Zone	- 0.265" H ₂ O
Unit 2 Reactor Zone	- 0.290" H ₂ O
Unit 3 Reactor Zone	- 0.255" H ₂ O
Unit 1 Refuel Zone	- 0.270" H ₂ O
Unit 2 Refuel Zone	- 0.265" H ₂ O
Unit 3 Refuel Zone	- 0.270" H ₂ O

- | | |
|-------------------------------------|--------------------------|
| 3. Wind Speed: | 3.1 miles per hour (mph) |
| 4. Wind Direction: | 123° azimuth |
| 5. Reactor Building Air Temperature | 82.7° F |
| 6. Outside Air Temperature | 75.4° F |

5.0 Analysis and Interpretation

The combined zone secondary containment (three reactor zones and the common refueling zone) was leak rate tested on September 27, 1997, using O-SI-4.7.C-1. The purpose of this test was to confirm secondary containment operability prior to Unit 2 Cycle 9 refueling. The SI results demonstrated secondary containment's capability to maintain greater than 0.25 inches of water vacuum under calm wind (< 5 mph) conditions with a system leakage rate of not more than 12,000 cfm. The test results showed an inleakage rate of 9,239 cfm while maintaining a vacuum of greater than 0.250 inches of water, which met the acceptance criteria ($\leq 12,000$ cfm) specified by BFN TS Surveillance Requirement 4.7.C.1.a.