TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II 94 007/5 October 11, 19844/

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

Dear Mr. O'Reilly:

BROWNS FERRY NUCLEAR PLANT UNIT 2 - REACTOR BUILDING CONTAINMENT LEAK RATE TEST - 90-DAY REPORT

Enclosed is the report on secondary containment leak rate testing for the Browns Ferry Nuclear Plant unit 2. This report is submitted pursuant to Browns Ferry Technical Specifications Section 6.7.3.C.1.a. 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 cc (Enclosure):

Mr. Harold R. Denton, Director Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Mr. R. J. Clark Browns Ferry Project Manager U.S. Nuclear Regulatory Commission 7920 Norfolk Avenue Bethesda, Maryland 20814

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ENCLOSURE SECONDARY CONTAINMENT LEAK RATE TEST BROWNS FERRY NUCLEAR PLANT UNIT 2

1.0 Browns Ferry Nuclear Plant Unit 2 Secondary Containment Leak Rate Test Report per Technical Specification 6.7.3.C.1.a.

2.0 Purpose

This report describes the results and analysis of the test data taken during leak rate testing of the Browns Ferry Nuclear Plant Unit 2 secondary containment pursuant to Technical Specification 4.7.C.1.a.

3.0 Procedure

Surveillance Instruction (SI) 4.7.C outlines the procedures followed during secondary containment leak rate testing.

4.0 Data

The surveillance instruction was performed concurrently on all zones. The attached surveillance instruction data sheets list the following test data:

1.	Standby gas treatment system flowrate:	9,509	CFM
2.	Reactor building d fferen tial pressures	-	
	Unit 1 Reactor Zone Unit 2 Reactor Zone Unit 3 Reactor Zone	>50 36 365	in H ₂ 0 in H ₂ 0 in H ₂ 0
	Unit 1 Refuel Zone Unit 2 Refuel Zone Unit 3 Refuel Zone	37 37 37	$\begin{array}{c} \text{in } H_20 \\ \text{in } H_20 \\ \text{in } H_2^20 \end{array}$
3.	Wind Speed	4.5	MPH
4.	Wind Direction	191°	

5.0 Analysis and Interpretation

Technical Specification 4.7.C.1.a requires that secondary containment capability to maintain 1/4" water vacuum under calm (<5 MPH) wind conditions with a total system inleakage of not more than 12,000 CFM shall be demonstrated at each refueling outage prior to refueling. The technical specification allowable inleakage value of 12,000 CFM has been conservatively reduced by 800 CFM. This reduction was administratively imposed because of an Engineering Design identified nonconformance concerning the seismic qualifications of auxiliary boiler penetrations into secondary containment. The secondary containment (all three reactor zones and the common refuel zone) was leak rate tested on September 12, 1984. The test was satisfactorily performed. The results proved the secondary containment capability of maintaining less than -.25 in H₂O with less than 11,200 CFM of of inleakage.