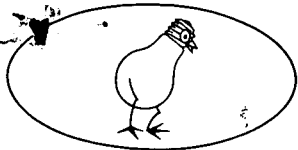


Regulatory

File Cy.



Commonwealth Edison Company

ONE FIRST NATIONAL PLAZA ★ CHICAGO, ILLINOIS

Address Reply to:

POST OFFICE BOX 767 ★ CHICAGO, ILLINOIS 60690

March 17, 1972

Dr. Peter A. Morris, Director
Division of Reactor Licensing
U.S. Atomic Energy Commission
Washington, D.C. 20545

50 - 237

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Dear Dr. Morris:

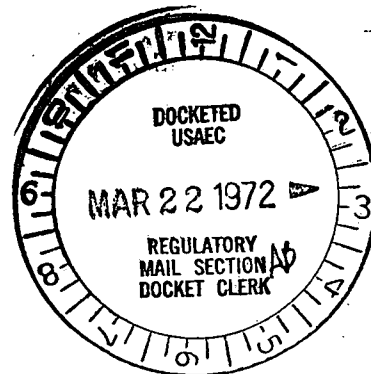
Enclosed are 60 copies of a Summary Technical Report describing a secondary containment leak rate test which was recently performed on Dresden Unit 2. This test was performed in accordance with Section 4.7.C.1.c of the Dresden Unit 2 Technical Specifications and is being submitted in accordance with the requirement of Section 6.6.E of Appendix A to DPR-19.

Very truly yours,

Wayne L. Stiede

Wayne L. Stiede
Nuclear Licensing Administrator

cc: Mr. Boyce H. Grier
Region III Compliance



1551
237-2901 LB

March 23, 1972
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DRESDEN NUCLEAR POWER STATION UNITS 2 & 3
SECONDARY CONTAINMENT LEAK RATE TEST SUMMARY

INTRODUCTION

Prior to the shutdown of Unit #2 for its second refueling outage, a Secondary Containment Leak Rate Test was performed on the combined volume of both Units 2 and 3. The test was performed to demonstrate the ability of the standby gas treatment system to maintain a 1/4 inch of water vacuum in both reactor buildings simultaneously with a filter train flow rate of not more than 4000 cfm.

SECONDARY CONTAINMENT CAPABILITY TEST

To demonstrate performance and reliability of the standby gas treatment system and the reactor containment integrity, a detailed test procedure was used to include the "most normal" building conditions during plant operation. This consisted of (1) allowing work to continue within the buildings during the conduct of the test with normal traffic moving unheeded through building personnel air locks; and (2) gathering of all necessary data with a calibrated inclined manometer.

The test was performed with "A" SGT train, by initiating a "HI" radiation signal in the Units 2 and 3 ventilation system radiation monitors. This action isolated the ventilation systems, stopping all supply and exhaust fans, and starting the "A" SGT train, which was in the "Primary" mode. When equilibrium conditions were reached, wall differential pressure readings were taken. "Zero wind" data were taken following shutdown of the SGT system and allowing the building to come to equilibrium with environs.

Test Results

Data on wind speed, wind direction, building inside and outside temperatures, and differential building pressures were obtained at a standby gas treatment system exfiltration flow rate of 4000 cfm on "A" filter train. All instrumentation required for obtaining test data was calibrated prior to the testing.

The results of the test were corrected to zero wind conditions using the exfiltration flow rate of "0" cfm as the "static" reference. Corrected data at the flow rate of 4000 cfm, therefore, gaged the rate at which air was exhausted through the system and the amount of in leakage to the building.

Test Results Corrected to Zero Wind Conditions

Filter Train "A"

Flow: 4000 cfm

Units 2/3 Average Building Wall DPs (Inches of Water)

<u>North</u>	<u>West</u>	<u>South</u>	<u>East</u>	<u>Avg.</u>
-0.31	-0.29	-0.28	-0.26	-0.285

The results of the test indicate that the standby gas treatment filter train is capable of maintaining one-quarter inch of water vacuum under calm wind conditions with filter flow rate of not more than 4000 cfm. Average building differential pressure for the train results in -0.285 inches of water, indicating adequate performance of the secondary containment and standby gas treatment system.

290.3

SUMMARY OF TEST DATA

DRESDEN 2/3 REACTOR BUILDING LEAK RATE

February 8, 1972

"A" SGTS Train

Flow (cfm)	<u>Average Wall DP (Inches Water)</u>			
	<u>North</u>	<u>West</u>	<u>South</u>	<u>East</u>
I 0	-0.01	-0.03	-0.02	-0.04
II 4000	-0.32	-0.32	-0.30	-0.30

SUMMARY OF WIND AND TEMPERATURE CONDITION

DRESDEN 2/3 REACTOR BUILDING LEAK RATE

February 8, 1972

Temperature (°F)

Indoor: Wet Bulb	53°
Dry Bulb	74°
Outdoor: Dew Point	6.5°
Dry Bulb	13°

Wind Velocity (MPH)

35' above grade level	4 ± 3
125' above grade level	5 ± 3
300' above grade level	6 ± 3
400' above grade level	6 ± 3

Wind Direction (Degrees: 360° = North)

35' above grade level	355°
125' above grade level	345°
300' above grade level	340°
400' above grade level	335°

290A