



Commonwealth Edison
 One First National Plaza, Chicago, Illinois
 Address Reply to: Post Office Box 767
 Chicago, Illinois 60690

September 10, 1982

Mr. James G. Keppler, Director
 Directorate of Inspection and
 Enforcement - Region III
 U.S. Nuclear Regulatory Commission
 799 Roosevelt Road
 Glen Ellyn, IL 60137

PRINCIPAL STAFF			
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OL		FILE	WCS

Subject: Quad Cities Station Units 1 and 2
 Secondary Capability Test Summary
 Technical Report
NRC Dockets 50-254 and 50-265

Dear Mr. Keppler:

Attached in accordance with Section 6.6.C.3 and Table 6.6-1, Area A of Appendix A to DPR-29 and DPR-30, is a summary of the Secondary Containment Leak Rate Test performed for the Quad Cities Station Units 1 and 2 Reactor Building on September 1, 1982. This test was performed in accordance with Section 4.7.C.1.c of the Quad Cities Units 1 and 2 Technical Specifications.

This test was performed as part of the Unit 1 pre-outage work, and the results were within the Technical Specifications requirements.

Very truly yours,

Thomas J. Rausch
 Thomas J. Rausch
 Nuclear Licensing Administrator
 Boiling Water Reactors

cc: Region III Inspector - Quad Cities

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QUAD-CITIES NUCLEAR POWER STATION UNITS 1 AND 2

SECONDARY CONTAINMENT LEAK RATE TEST SUMMARY

INTRODUCTION

Prior to the Unit One Cycle Six Refueling Outage, a Secondary Containment Leak Rate Test was performed on the combined volume of Unit One and Unit Two Secondary Containment Building. The test was performed to demonstrate the ability of the Standby Gas Treatment System (SBGTS) to maintain a one-fourth inch of water vacuum in both Reactor Buildings simultaneously with a filter train flow rate of not more than 4000 cfm.

The test was conducted with a local flow indication of 4000 cfm.

SECONDARY CONTAINMENT CAPABILITY TEST

The test was conducted with "A" SBGTS train in primary by initiating a "HI" radiation signal in the Units One and Two Reactor Building ventilation monitors. This action isolated the ventilation systems, stopping all supply and exhaust fans, and started the "A" SBGTS train. When equilibrium conditions were reached, wall differential pressure readings were taken. "ZERO WIND" data was taken following shutdown of the SBGTS and allowing the building to come to equilibrium with the environs.

TEST RESULTS

Data on wind speed, wind direction, building inside and outside temperatures, and differential building pressures were obtained at a SBGTS flow rate of approximately 4000 cfm on the "A" filter train.

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

TEST RESULTS CORRECTED TO ZERO WIND CONDITIONS

Filter Train: "A"
Flow Rate: 4000 cfm
Building Wall DP (Inches of Water)
North: -0.270
South: -0.270
East: -0.245
West: -0.255
Average: -0.260

The results of the test indicate that the Standby Gas Treatment Filter train is capable of maintaining one-fourth inch of water vacuum under the calm wind conditions with a filter train flow rate of no more than 4000 cfm. Average building differential pressure for the train results in -0.260 inches of water, indicating adequate performance of the Secondary Containment and Standby Gas Treatment System

SUMMARY OF TEST DATA

September 1, 1982

Quad-Cities 1 and 2 Reactor Building Leak Rate

"A" SBT Train

<u>Flow (cfm)</u>	<u>Wall Pressure (inches of water)</u>			
	<u>NORTH</u>	<u>SOUTH</u>	<u>EAST</u>	<u>WEST</u>
1. 4000	-0.270	-0.270	-0.245	-0.255
2. 0	+0.00	+0.00	+0.00	+0.00

SUMMARY OF WIND AND TEMPERATURE CONDITIONS

Temperature (F°)

Indoor 99°F

Outdoor 76°F

Elevation Above Grade Level

(Feet)
196

Wind Velocity

(MPH)
13

Wind Direction

NNW
335°