

FILES

A hand calculation was made of the leak rate for Oconee 1 using data from the October 29, 1971 report "Integrated Leak Rate Test of the Reactor Containment Building."

Two cases were calculated:

Time = 2:15 to 12:15 (Full 10 hr. interval)  
 Initial Pressure = 73.375829 psia (uncorrected)  
 Initial Temperature = 85.341498 F  
 Final Pressure = 73.172256 psia (uncorrected)  
 Final Temperature = 83.855699 F  
 Vapor Pressure = 1 psia

L = .012

Time = 7:15 to 12:15 (Last 5 hr. interval)  
 Initial Pressure = 73.249397 (uncorrected)  
 Initial Temperature = 84.388097 F  
 Final Pressure = 73.172256 psia (uncorrected)  
 Final Temperature = 83.855699 F  
 Vapor Pressure = 1 psia

L = .045

The difference in the calculated results notwithstanding arithmetic precision indicates that early biases in measured data influence the leak rate on the low side (for the Oconee 1 leak rate test). However, over the second half of the 10 hr. test period the measured leak rate of .045 compares favorably with the predicted .0474 value.

Irving A. Peltier  
 PWR-4  
 Division of Reactor Licensing

OFFICE ▶	PWR-4				
SURNAME ▶	IAPeltier				
DATE ▶	1/6/72				