



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

August 27, 1982

Mr. Darrell G. Eisenhut, Director  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Dresden Station Units 2 and 3  
Appendix J Requirements for  
the RBCCW Isolation Valves and  
Personnel Containment Airlock  
NRC Docket Nos. 50-237/249

Reference (a): D. G. Eisenhut letter to L. DelGeorge  
dated June 25, 1982.

Dear Mr. Eisenhut:

Reference (a) granted certain exemptions from 10 CFR 50.54(o) and Appendix J requested by Commonwealth Edison for Dresden Station Units 2 and 3, and denied our request in two areas.

Concerning the denial for exemption on the Reactor Building Closed Cooling Water (RBCCW) supply and return isolation valves, we have initiated modifications to install the proper local leak rate test taps on the RBCCW lines. This work cannot be performed until a refueling outage, and considering the time needed for engineering review and approval, material procurement, and installation, our schedule is to complete these modifications on Dresden 3 in the Fall 1983 outage and on Dresden 2 in the Fall 1984 outage. No Technical Specification changes are required for this modification.

The second exemption denial concerned testing the personnel containment interlock doors. As requested in Reference (a), we have attached draft proposed Technical Specification changes which we believe will meet the intent of Appendix J to 10 CFR 50. Following your initial review of these draft changes, we will submit proposed license amendments with appropriate fees. At that time, the implementation plans and schedules can be addressed.

The interlock doors were designed to withstand pressure from one direction, that is 48 psig from the drywell with minimum leakage. These doors are subjected to Pa, 48 psig, during integrated leak rate testing along with all other drywell penetrations. The draft proposed Technical Specification changes would quantify the interlock doors through-leakage at Pa during integrated leak rate tests.

Due to the one directional design characteristic of these doors, the Type B and Type C tests are performed by pressurizing between the two doors. Using this procedure a strong back is required

8209030276 820827  
PDR ADOCK 05000237  
P PDR

A017

August 27, 1982

to be placed on the inner door. Because of the limits of the strong back, the Type B and Type C test procedure is performed at 10 lbs. Without the strong back, the inner door will support only 1.5 lbs. The attached draft changes require 1.0 psig air lock testing following door closure after containment entry. To ensure that no damage will occur to the inner door while the unit is operating, this testing will only be conducted when primary containment is not required. The 1.0 psig value provides ample pressure to verify that the door seals have not been affected by the entry, while providing a 0.5 psig margin to the reverse-pressure 1.5 psig inner door limit.

It is important to note that our experience with personnel interlock leak testing shows that only small or zero leakages have occurred in the past, with the leakage observed being attributed to handwheel packing, not door seals. The design and placement of the seals is such that they are not likely to be abused during drywell entry. Furthermore, their design ensures a tighter seal at higher containment pressures. The following air lock test history is provided for your information:

<u>YEAR</u>	<u>UNIT</u>	<u>LEAKAGE AT (10 psig)</u>
1982	3	0
1981	2	0
1980	3	0
1979	2	17.42 SCFH
1978	3	12.48 SCFH
1977	2	10.108 SCFH
1976	3	0
1975	3	0
1974	3	6.426 SCFH
1973	3	0

Please address any questions that you may have concerning this matter to this office.

One (1) signed original and thirty-nine (39) copies of this transmittal are provided for your use.

Very truly yours,



Thomas J. Rausch  
Nuclear Licensing Administrator

lm

Attachment

cc: Region III Inspector - Dresden

ATTACHMENT

DRAFT: Proposed Changes to  
Dresden Units 2 and 3  
DPR-19 and DPR-25

4883N

### 3.7 LIMITING CONDITION FOR OPERATION

2. Primary containment integrity shall be maintained at all times when the reactor is critical or when the reactor water temperature is above 212°F and fuel is in the reactor vessel except while performing low power physics tests at atmospheric pressure at power levels not to exceed 5 MW(t).
- a. Primary containment leakage rates are defined from:
- (1) The calculated peak containment internal pressure,  $P_a$ , is equal to 48 psig.
  - (2) The containment vessel reduced test pressure,  $P_t$ , is equal to 25 psig.
  - (3) The maximum allowable leakage rate at a pressure of  $P_a$ ,  $L_a$ , is equal to 1.6 percent by weight of the containment air per 24 hours at 48 psig.
  - (4) The maximum allowable test leakage rate at a pressure of  $P_t$ ,  $L_t$ , is less than or equal to  $L_a$  ( $L_{tm}/L_{am}$ ). If  $L_{tm}/L_{am}$  is greater than 0.7,  $L_t$  is (specified as equal to)  $L_a (P_t/P_a)^{1/2}$ .
  - (5) The total measured leakage rates at pressures of  $P_a$  and  $P_t$  are  $L_{am}$  and  $L_{tm}$ , respectively.
- b. When primary containment integrity is required, primary containment leakage rates shall be limited to:

### 4.7 SURVEILLANCE REQUIREMENTS

2. The primary containment integrity shall be demonstrated by conducting Primary Containment Leak Tests and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR 50 using the methods and reference therein.
- a. Three Type A tests (Overall Integrated Containment Leakage Test) shall be conducted at approximately equal intervals during each 10 year plant in-service inspection interval at either  $P_a$  or  $P_t$  with the last being done during the 10-year in-service inspection shutdown.
- b. If any periodic Type A test fails to meet either 75 percent of  $L_a$  or 75 percent of  $L_t$ , the test schedule for subsequent Type A tests shall be reviewed and approved by the Commission.
- c. If two consecutive Type A tests fail to meet either 75 percent of  $L_a$  or 75 percent of  $L_t$ , a Type A test shall be performed at each shutdown for refueling or approximately every 18 months until two consecutive Type A tests meet the above requirements, at which time the normal test schedule may be resumed.
- d. The accuracy of each Type A test shall be verified by a supplemental test which:
- (1) Confirms the accuracy of the test by verifying that the difference between the supplemental data and the Type A test data is within 25 percent of  $L_a$  or 25 percent of  $L_t$ .

DR

AFT

DBATL

### 3.7 LIMITING CONDITION FOR OPERATION

- (1) An overall integrated leakage rate for Type A tests of:
  - (a)  $L_{am}$  less than or equal to 75 percent of  $L_a$ .
  - (b)  $L_{tm}$  less than or equal to 75 percent of  $L_t$ .
- (2)
  - (a) A combined leakage rate of less than or equal to 60 percent of  $L_a$  for all testable penetrations and isolation valves subject to Type B and C tests except for main steam isolation valves.
  - (b) A leakage rate of less than or equal to 3.75 percent of  $L_a$  or any one air lock.
  - (c) 11.5 SCF per hour for any main steam isolation valve at a test pressure of 25 psig.

### 4.7 SURVEILLANCE REQUIREMENTS

- (2) Has a duration sufficient to establish accurately the change in leakage rate between the Type A test and the supplemental test.
  - (3) Requires the quantity of gas injected into the containment or bled from the containment during the supplemental test to be equivalent to at least 9 scfm.
- e. Type B and C tests shall be conducted at  $P_a$ , at intervals no greater than 24 months except for tests involving:
- (1) Main steam line isolation valves which shall be tested at a pressure of 25 psig each operating cycle.
  - (2) Bolted double-gasketed seals which shall be tested at a pressure of 48 psig whenever the seal is closed after being opened and each operating cycle.
- f. Primary containment personnel air lock shall be tested:
- (1) When primary containment is not required and within 72 hours following closure, by verifying leakage rate is less than or equal to its limit, perform at 1.0 psig.
  - (2) When primary containment is required and entry made, the 1.0 psig test will be performed at the next time primary containment is not required.
  - (3) Each operating cycle at 10 psig when primary containment integrated test is not scheduled

DRAFT

0822

### 3.7 LIMITING CONDITION FOR OPERATION

### 4.7 SURVEILLANCE REQUIREMENTS

(4) At  $P_a$ , 48 psig, when conducting primary containment integrated leak rate test and verifying that the overall air lock leakage rate is within its limit.

g. Surveillance requirements 4.7.f(1) and 4.7.f(2) are not required if a 1.0 psig test has been performed within the previous 6 months.

h. Continuous Leak Rate Monitor

(1) When the primary containment is inerted, this containment shall be continuously monitored for gross leakage by review of the inerting system make-up requirements.

(2) This monitoring system may be taken out of service for the purpose of maintenance or testing but shall be returned to service as soon as practical.

i. The interior surfaces of the drywell shall be visually inspected each operating cycle for evidence of deterioration.

DRAFT



0 6 4 1

DRAFT

Pages 112-115 are intentionally blank.

0621