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REGULATORY DOCKET FILE COPY

April 28, 1978

Mr. Edson G. Case, Deputy Director
 Office of Nuclear Reactor Regulation
 U.S. Nuclear Regulatory Commission
 Washington, DC 20555

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Subject: Dresden Station Units 2 and 3
 Proposed Amendment to Facility
 Operating License Nos. DPR-19 and DPR-25
 Concerning Minimum Duration of the
 Integrated Primary Containment Leak
 Rate Test (IPCLRT)
NRC Docket Nos. 50-237/249

Dear Mr. Case:

Pursuant to 10 CFR 50.59, Commonwealth Edison proposes to amend the Dresden Station Units 2 and 3 Technical Specifications concerning the minimum duration of the integrated primary containment leak rate test.

The proposed change will require amending page 110 for both Dresden Units 2 and 3. Attachment I contains the changes for both units.

This proposed change would reduce the minimum duration of the integrated primary containment leak test from 24 hours to 12 hours. The requirement that the test continue beyond this minimum time, if necessary, to demonstrate compliance with the Technical Specification limits for allowable leakage remains unchanged.

The basis for this change request is the availability of improved instrumentation and data acquisition equipment and the direct data reduction by the station process computer. The system can automatically scan the containment conditions and provide a weighted average, statistically determined leakage rate as often as every 10 minutes during the test. This improved capability yields an acceptable calculated leak rate and rapid convergence of the 95% confidence limits long before 24 hours have elapsed.

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Reports of two recent IPCLRT's using the new equipment and methods indicate that an acceptable statistical leak rate and associated upper 95% confidence level can be verified in as little as 8-10 hours of testing. Thus, establishing a 12 hour minimum test provides reasonable assurance that an acceptable leak rate can be established by the end of this minimum test duration. The minimum 4 hour stabilization period at 48 psig required by ANSI N45.4-1972 is not affected by this proposed change and must continue to precede the minimum 12 hour test.

The bases for this change are:

- a. The functional integrity of the primary containment can be demonstrated independent of the test period, so long as equilibrium has been attained in the variables measured during the test. As a matter of fact, 10 CFR 50, Appendix J, specifies a minimum four hour stabilization phase prior to the initiation of data acquisition.
- b. The three tests performed in 1976 (Quad-Cities 1, 2 and Dresden 2) by CECO. have demonstrated that the statistical leak rate has reached an equilibrium value after approximately 8-10 hours.
- c. The data acquisition console for ILRT's currently being used at Dresden permits essentially instantaneous data acquisition. The primary containment instrumentation directly inputs into the station process computer enabling a data scan and calculation output upon demand. The result is that many data sets are obtained per each hour providing a concrete basis for the statistical leak rate and associated upper 95% confidence limit. Manual data input into a programmable calculator provides a twenty minute data base at best, compared to a computer based interval of ten minutes. Based on a twenty-four hour test period, the resultant attainable number of data sets for manual and automatic schemes is found to be 72 and 144, respectively. With the process computer based system, the capability exists for 30 second data set intervals providing the capability to identify system or instrumentation malfunctions with minimal time lag. Utilization of the station process computer represents the ultimate in ease of data acquisition, interpretation, analysis and bookkeeping.

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- d. The NRC regulation for containment leak rate testing, 10 CFR 50, Appendix J, specifies that the statistical leak rate be adjusted to that which would be obtained for a 24-hour test, but does not require that the test duration actually be 24 hours.
- e. ANSI N45.4-1972, Leakage-Rate Testing of Containment Structures for Nuclear Reactors, specifies that a test period shorter than 24 hours may be used if "It can be demonstrated to the satisfaction of those responsible for the acceptance of the containment that the leak rate can be accurately determined during a shorter test period."

This Technical Specification change has received both on-site and off-site review and approval. Please direct any questions concerning this matter to this office.

Pursuant to 10 CFR 170, Commonwealth Edison has determined that this proposed amendment is a combined Class II and Class I Amendment. As such, we have enclosed a fee remittance in the amount of \$1,600.00 for this proposed amendment.

Three (3) signed originals and thirty-seven (37) copies are provided for your use.

Very truly yours,



Cordell Reed
Assistant Vice-President

attachment

SUBSCRIBED and SWORN to
before me this 28th day
of April, 1978.

Nancy M. Dascenzo
Notary Public

ATTACHMENT I

3.7 LIMITING CONDITION FOR OPERATION

4.7 SURVEILLANCE REQUIREMENT

The leak rate difference, prior to and after repair when corrected to:

(a) P_t (48) - Method A

(b) P_t (25) - Method B

shall be added to the final integrated leak rate result.

(4) Closure of the containment isolation valves for the purpose of the test shall be accomplished by the means provided for normal operation of the valves.

(5) The integrated leak rate test shall last a minimum of twelve hours after stabilization and shall have a total of not less than twenty valid data points taken at approximately equal time intervals. At the conclusion of the test, the trend of the leak rate must be such that the maximum allowable leak rate would not have been exceeded if a 24 hour leak rate test had been chosen.

(6) The validity of the test results shall be verified by measuring the quantity of air required to return to the starting point (or other methods of equal sensitivity).

b. Acceptance Criteria for IPCLT

(1) The maximum allowable leak rate for either test method, L_p , shall not exceed 1.6 weight percent of the contained air per 24 hours at the test pressure of P_t (48).