

UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of )  
COMMONWEALTH EDISON COMPANY ) Docket No. 50-237  
(Dresden Nuclear Power Station, )  
Unit 2) )

EXEMPTION

I.

Commonwealth Edison Company (CECo, the licensee) is the holder of Facility Operating License No. DPR-19 which authorizes operation of the Dresden Nuclear Power Station, Unit 2 (the facility) at a steady-state power level not in excess of 2527 megawatts thermal. The facility is a boiling water reactor located at the licensee's site in Grundy County, Illinois. This license provides, among other things, that the facility is subject to all rules, regulations and Orders of the Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

II.

By letter dated May 27, 1992, pursuant to 10 CFR 50.12(a), Commonwealth Edison requested a schedular exemption for Dresden Unit 2 from the 24-month test interval for Type B and C leak rate tests required by 10 CFR Part 50, Appendix J, Sections III.D.2(a) and III.D.3. The exemption is requested to support the Dresden Unit 2 refueling outage schedule and to avoid the potential for an earlier reactor shutdown.

Dresden Unit 2 entered into the Cycle 12 refueling outage (D2R12) on September 23, 1990. Type B and C local leak rate testing began on September 23, 1990 and continued through January 3, 1991. However, several

unanticipated events caused an unusually long outage with startup not occurring until February 10, 1991. In addition, Dresden Unit 2 entered several maintenance outages during Cycle 13. This included a 111 day outage, while Unit 3 was in a refuel outage, to resolve problems relating to the 250 Volt station battery, divisional cable separation, and undervoltage concerns. As a result of these extended outages, complete fuel utilization will not be achieved by the originally scheduled refuel outage in September 1992. CECO is anticipating rescheduling the Dresden Unit 2 refuel outage from September 1992 to January 4, 1993, and has requested a maximum exemption of up to 122 days, for the most extreme case, from the 24-month Appendix J test interval for Type B and C testable volumes for the penetrations that can not be tested during operation.

### III.

In its letter dated May 27, 1992, CECO requested a one-time exemption from the 24-month Type B and C test interval requirement of Appendix J for certain volumes (i.e., bellows, manway gasket seal, flanges, and isolation valves) identified in Attachments II and III to the submittal. CECO stated that these volumes can not be tested while the reactor is at power and provided the basis for this conclusion in Attachment IV of the submittal.

CECO has provided leakage test results and maintenance information on these volumes for the past two testing programs conducted in the 1988-1990 time frame. The current maximum pathway leakage rate for Dresden Unit 2 as determined through Type B and C leak rate testing, is 333.53 Standard Cubic Feet Per Hour (scfh). This value is approximately 68% of the Technical

Specification limit of 488.45 scfh ( $0.6L_g$ ). As a result of additional maintenance being performed on various pathways during Cycle 13, the current leakage rate has been reduced from the D2R12 "As Left" leakage rate of 362.29 scfh. In addition, the D2R12 "As Left" total minimum pathway leakage rate for Type B and C testable penetrations was 126.69 scfh. The minimum pathway data from the last two Unit 2 refuel outages also indicates that on a minimum pathway basis, the quality of primary containment does not degrade excessively through the course of the fuel cycle. In addition, the D2R12, "As Left" Integrated Leak Rate Test, completed on December 18, 1990, indicated that the primary containment overall integrated leakage rate, which obtains the summation of all potential leakage paths including containment welds, valves, fittings, and penetrations, was 0.8128 wt%/day. This value is the sum of the 95% upper confidence limit calculated leak rate of 0.7428 wt%/day plus the leakage rate of all nonvented pathways and the leakage compensation for the change in the drywell sump levels. This value is approximately 67% of the limit specified in the Technical Specifications ( $1.2 \text{ wt\%/day}$  or  $0.75 L_g$ ).

In order to provide an added margin of safety and to account for possible increases in the leakage rates of untested volumes during the relatively short period of the exemption, the Dresden Nuclear Power Station will impose an administrative limit for maximum pathway leakage of 85% of  $0.6L_g$  for the remaining Unit 2 fuel cycle.

To reduce the number of volumes which need an exemption, CECO will test the volumes listed in Attachment V of its submittal during reactor operation. In addition, volumes listed in Attachment III of its submittal will be tested should a forced outage of suitable duration occur prior to January 4, 1993.

The staff has reviewed CECO's submittal regarding the Appendix J test interval exemption request. Based on the above discussion, the staff finds that for the components identified in Attachments II and III of the submittal, an exemption from the local leak rate (LLRT) test frequency specified in Appendix J should be granted based on the following.

1. Testing has shown low "as found" leakage during the past two outages. The ample margin between the measured leakage and the allowable leakage should accommodate any degradation likely to be experienced for these components during the extended period.
2. The intent of Appendix J was that Type B and C testing be performed during a refueling outage. It is not the intent of Appendix J to require a shutdown solely for LLRTs. The exemption would provide relief from the requirements of Appendix J to allow a test interval extension for these components which only became necessary as a result of the unusually long Cycle 12 refueling outage.
3. Although a 122 day extension has been requested, many of the affected volumes will need an exemption for a much shorter time.

Based on the above, the staff concludes that the licensee's proposed extension of the test intervals for these components identified in its submittal are acceptable. This is a one-time exemption from the two-year Type B and Type C test interval requirements as prescribed in Appendix J, and is intended to be in effect until January 4, 1993. This approval is based on the assumption that all other tests will be conducted in accordance with the requirements of Appendix J.

IV.

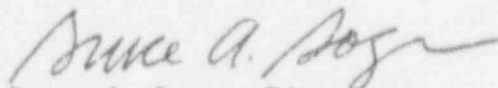
By letter dated May 27, 1992, CECO also identified special circumstances. As discussed above, the exemption request is for a short duration relative to the two year requirement. In addition, all testing that can be reasonably performed while the plant is operating will be completed and additional testing will be performed if an unscheduled outage of suitable duration should occur. This meets a criterion for a special circumstance per item (v) of 10 CFR 50.12(a)(2), i.e., "The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation."

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), that (1) this exemption is authorized by law and will not endanger life or property or the common defense and security, and is otherwise in the public interest, and (2) the Exemption would provide only temporary relief from the applicable regulation and the licensee has made good faith efforts to comply with the regulation. Therefore, the Commission hereby grants an exemption as described in Section III above from 10 CFR 50, Appendix J, Sections III.D.2(a) and III.D.3 to the extent that the 24-month interval for performing Type B tests, except for air locks, and Type C tests may be extended for 122 days until January 4, 1993, on a one-time basis only, for Dresden Unit 2.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this Exemption will have no significant impact on the environment (57 FR 32570).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Bruce A. Boger, Director  
Division of Reactor Projects - III/IV/V  
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland  
this 24th day of July 1992