

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

DETROIT EDISON COMPANY

(Fermi 2)

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Docket No. 50-341

EXEMPTION

I.

Detroit Edison Company (the licensee) is the holder of Facility Operating License No. NPF-43 which authorizes operation of the Fermi 2 Nuclear Plant at steady-state reactor power levels not in excess of 3430 megawatts thermal. The Fermi 2 facility is a boiling water reactor located at the licensee's site in Monroe County, Michigan. The license provides, among other things, that it is subject to all rules, regulations, and Orders of the Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

II.

Paragraph III.A.6.(b) of Appendix J to 10 CFR Part 50 requires, in part, that if two consecutive periodic Type A tests fail to meet the applicable acceptance criteria in III.A.5.(b), a Type A test shall be performed at each refueling shutdown or approximately every 18 months, whichever occurs first, until two consecutive Type A tests meet the acceptance criteria, after which the normal inspection interval specified in III.D may be resumed.

Pursuant to 10 CFR 50.12(a), the NRC may grant exemptions from the requirements of the regulations (1) which are authorized by law, will not present an undue risk to the public health and safety, and are consistent with

the common defense and security; and (2) where special circumstances are present.

III.

By letter dated May 24, 1993, the licensee requested a one-time exemption from the requirements of 10 CFR Part 50, Appendix J, III.A.6.(b) identified above, which were in effect due to "As-Found" Type A failure in 1989 and 1992. The licensee has verified that Type C leakage rates were the reason for the "As-Found" failures.

The two "As-Found" Type A failures were caused by the addition of Type C penalties. The licensee indicated that to date all containment deficiencies have been identified during Type C testing and; therefore, it is proposed that Type C testing be relied upon in lieu of the increased frequency Type A test. Fermi 2 has established stringent LLRT [local leak rate test] administrative leak rate acceptance criteria on a per valve basis, based on ASME Code guidance, individual valve test maintenance history, design, function, and service. Test acceptance criteria range from 0.20 scfh [standard cubic feet per hour] to 15.00 scfh. This ensures valve leak tight integrity is maintained from Type A test to Type A test. The licensee indicated that if valves are repaired when they exceed their individual administrative acceptance criteria, and corrective modifications or replacement are implemented, the overall containment integrity will be assured with future integrated leak rate tests (ILRTs) meeting their "As-Found" acceptance criteria. The licensee indicated that the implementation of the proposed Corrective Action Plan and continued Type C leakage testing provide reasonable assurance that the underlying purpose of Appendix J is being met. For details concerning the licensee's corrective actions for the previous Type C valve leakage, see the staff's Safety Evaluation dated February 22, 1994.

Information Notice (IN) No. 85-71, "Containment Integrated Leak Rate Tests," states that if Type B and C local leakage rates constitute an identified contributor to the failure of the "As-Found" Type A test, the licensee may submit a Corrective Action Plan with an alternate leakage test program proposal as an exemption request. If the submittal is approved and an exemption granted, the licensee may implement the corrective action and alternate leakage rate test program in lieu of the required increase in Type A test frequency incurred after the failure of two successive Type A tests.

IV.

Accordingly, the Commission concluded that the licensee's Corrective Action Plan and proposed alternative test schedule are acceptable and that a Type A test during refueling outage four (RFO 4) is not necessary. The licensee has identified the problem penetrations that caused previous Type A failures in 1989 and 1992, and has implemented corrective actions to address these problems. There is reasonable assurance that the containment leakage-limiting function will be maintained. The normal Type A test schedule in Section III.D of Appendix J (three tests in 10 years) will require the next Type A test to be performed during RFO 5.

The special circumstances for granting this exemption pursuant to 10 CFR 50.12 have also been identified. As stated in part in 10 CFR 50.12(a)(2)(ii), special circumstances are present when application of the regulation in the particular circumstances is not necessary to achieve the underlying purpose of the rule. The purpose of Section III.A.6.(b) of Appendix J is to establish an increased testing frequency for Type A tests, where previous testing has demonstrated unsatisfactory performance, in order to provide increased assurance that previous problems have been corrected. After two consecutive tests at the increased testing frequency pass, the normal testing frequency of

Section III.D. may be resumed. By verifying that previous Type A test failures were due to Type C leakage and by implementing a Corrective Action Plan to effectively correct previous Type C failure, the licensee has provided additional assurance that containment integrity will be maintained. Consequently, the Commission concludes that the special circumstances of 10 CFR 50.12(a)(2)(ii) exist in that application of the regulation in these particular circumstances is not necessary to achieve the underlying purpose of the rule.

IV.

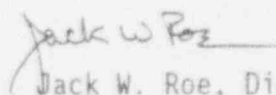
Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, this exemption as described in Section III above is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. The Commission further determines that special circumstances as provided in 10 CFR 50.12(a)(2)(ii) are present justifying the exemption.

Therefore, the Commission hereby grants a one-time exemption as described in Section III above from the requirement in 10 CFR Part 50, Appendix J, III.A.6.(b) to perform Type A containment ILRTs at an increased test frequency.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the environment (59 FR 6977).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Jack W. Roe, Director
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 22nd day of February 1994