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7590-01-P

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 Enrico Fermi Atomic Power Plant, Unit 2 (the facility). The facility is a boiling water reactor located at the licensee's site in Monroe County, Michigan. This license provides, among other things, that the facility is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

II.

By letter dated September 1, 1995, the licensee requested, pursuant to 10 CFR 50.12(a), a one-time schedular exemption for Fermi, Unit 2, from the local leak rate test intervals 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. Type B and C tests are associated with leakage testing of bellows, manway gasket seals, flanges, and containment isolation valves. The purpose of the tests is to assure that leakage through primary reactor containment does not exceed allowable leakage rate values as specified in the Technical Specifications and that periodic surveillance is performed. Sections III.D.2(a) and III.D.3 require, in part, that Type B and C tests be performed at intervals no greater than 2 years. The licensee has proposed a one-time exemption to allow a 25-percent extension to the 2-year testing interval.

The exemption is requested to support a revised outage schedule and to avoid the potential for a forced reactor shutdown. If a forced outage is imposed to perform testing, it would present undue hardship and cost in the form of increased radiological exposure. Furthermore, if a forced outage is imposed to perform the required testing, an additional plant shutdown and startup will be required.

### III.

Due to a lengthy turbine outage and power ascension program, the licensee has deferred the 1996 refueling outage from March 1996 until September 1996. This will permit targeted fuel burnup to be met so that Cycle 6 operation can be conducted as planned. However, the 2-year interval for performing Type B and C tests expires in April 1996. Since these tests cannot be performed when the plant is at power, performance of these tests to meet the 2-year interval would necessitate a plant shutdown. Therefore, Detroit Edison has proposed a one-time exemption to allow a 25-percent extension to the testing interval. This will allow for a maximum Type B and C test interval of 30 months and will permit continued plant operation until the September 27, 1996, outage date.

The proposed exemption would add a one-time only 6-month extension to the Appendix J test intervals for Type B and C testing. As stated in 10 CFR Part 50, Appendix J, the purpose of the primary containment leak rate testing requirements is to ensure that leakage rates are maintained within the Technical Specification requirements and to assure that proper maintenance and repair is performed throughout the service life of the containment boundary components. The requested exemption is consistent with the intent of 10 CFR 50.12(a), in that it represents a one-time only schedular extension of short duration. The required leak tests will still be performed to assess

compliance with Technical Specification requirements, albeit later, and to assure that any required maintenance or repair is performed. As noted in Section III.D.2(a) of Appendix J, it was intended that the testing be performed during refueling outages or other convenient intervals. Extending the Appendix J intervals by a small amount to reach the next refueling outage will not significantly impact the integrity of the containment boundary, and therefore, will not significantly impact the consequences of an accident or transient in the unlikely event of such an occurrence during the 6-month extended period.

Past Unit 2 local leak rate test data have, in general, demonstrated good leak rate test results. A combined Type B and C leakage rate was established by the licensee at the conclusion of the last refueling outage and a running total leakage is maintained during each operating cycle. This running total leakage rate is 73.81 standard cubic feet per hour, which is 41.5 percent of the limit of  $0.6 L_a$ . Based on this margin, it is clear that extending the test interval a maximum of 6 months will not affect the overall integrity of the containment.

On September 12, 1995, shortly after the licensee's submittal, the Commission approved amendments to 10 CFR Part 50, Appendix J, to adopt performance-oriented and risk based approaches to containment leakage testing. The new rule allows licensees the option of continuing to comply with the previous Appendix J or to adopt the new performance-based standards. The new rule allows for extending the test intervals for up to 5 years for Type C tests and 10 years for Type B tests. Industry guideline NEI 94-01 provides a methodology for establishing test frequencies based on performance. An interval of 30 months is initially established (except for air locks), with

provisions to increase the test intervals based on satisfactory performance. Additionally, an extension of up to 25-percent of the test interval (not to exceed 12 months) is allowed for scheduling purposes only. Thus, the licensee's proposal to extend the interval for Type B and C tests to a maximum of 30 months is within the most limiting test interval that is permitted by the new rule, i.e., 30 months plus 25-percent extension for scheduling.

As indicated, the revised Appendix J was not available when the licensee was preparing this exemption request. The option involving performance-oriented and risk-based approaches is strictly voluntary and the licensee is under no obligation to adopt it. Adoption of the new rule would require revisions to the technical specifications, additional training, a number of planning and scheduling changes, and a considerable amount of procedural modifications that are inconsistent with the time remaining before the April 1996 end date for the 2-year interval for Type B and C tests.

#### IV.

Based on the above, the staff concludes that the licensee's proposed extension of the test intervals for test components identified in its submittal is acceptable. This is a one-time exemption from the Type B and C test interval requirements as prescribed in Appendix J, and is intended to be in effect until the tests are performed during the fall 1996 refueling outage. This approval is based on the assumption that all other tests will be conducted in accordance with the requirements of Appendix J.

The Commission's regulations at 10 CFR 50.12 provide that special circumstances must be present in order for an exemption from the regulations to be granted. According to 10 CFR 50.12(a)(2)(ii), special circumstances are present whenever application of the regulation in the particular circumstances

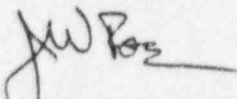
would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule. As discussed above, the intent of Appendix J is to assure that containment leakage does not exceed technical specifications limits, and the staff finds that this small interval extension will not significantly affect that assurance. To require a shutdown solely for surveillance testing is not necessary to achieve the underlying purpose of the rule.

Accordingly, the Commission has determined, pursuant to 10 CFR 50.12, that this exemption is authorized by law and 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 in that application of the regulation in these particular circumstances is not necessary to achieve the underlying purpose of the rule. Therefore, the Commission hereby grants the exemption from 10 CFR Part 50, Appendix J, Sections III.D.2(a) and III.D.3 to the extent that the Appendix J test interval for performing Type B and Type C tests may be extended by 25 percent until the fall 1996 refueling outage, on a one-time only basis, for Fermi 2, as described in Section III above.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the quality of the human environment (10 CFR 61576).

Dated at Rockville, Maryland this 18th day of December 1995.

FOR THE NUCLEAR REGULATORY COMMISSION



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