Consumers Power
POWERING MICHIGAN'S PROGRESS
General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0550

August 22, 1986

Director,
Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
REQUEST FOR EXEMPTION FROM CONTAINMENT INTEGRATED LEAK RATE TEST - RETEST SCHEDULE

Consumers Power Company letter of April 22, 1976, provided the results of the Containment Integrated Leak Rate Test (CILRT) conducted in January 1986 during the refueling outage. That letter noted the unacceptable leakage found during the CILRT (Type A test as defined in 10CFR50 Appendix J) was attributable to the penalty taken for the Local Leak Rate Test (LLRT) (Type B and C tests) results. Consumers Power Company committed to review previous CILRT results to determine if the Type B and C test results were the major contribution to the leakage rate and further indicated if this were the case that an exemption request would be submitted by August 1986. Like the 1986 results, the results of the CILRT conducted in 1981 did not meet the acceptance criteria. Our review has shown this failure was due to the contribution from the type B and C tests also. Therefore, as previously committed, we are submitting the attached exemption request that will allow the retest schedule of 10CFR50, Appendix J, Section III.D to be maintained and exempt the Palisades Plant from the requirements of Section III.A.6(b) of Appendix J. Consumers Power Company requests the exemption to apply through the time period when the next CILRT is required by Section III.D of Appendix J.

Because 10CFR50, Appendix J, III.A.6(b) requires a retest at each refueling shutdown or approximately every 18 months, whichever occurs first, the next test is due in approximately August 1987 (18 months from the last test). The next refueling outage is tentatively set early in 1988. Consumers Power Company requests that the NRC respond to this exemption request by February 1987 so that preparations for a CILRT, in the event this exemption request is denied, can proceed in an orderly manner.

8608280063 860822
PDR ADOCK 05000255
P PDR

OC0886-0130-NL02

A017
1/1

Rec'd w/check $150.00

A check in the amount of $150 is enclosed in accordance with 10CFR170.12(c).

James L. Kuemin

James L Kuemin
Staff Licensing Engineer

CC Administrator, Region III, USNRC
NRC Resident Inspector - Palisades

Attachment

ATTACHMENT 1

Consumers Power Company
Palisades Plant
Docket 50-255

EXEMPTION REQUEST

August 22, 1986

2 Pages

AT0886-0130-NL02

PALISADES PLANT

EXEMPTION REQUEST
CONTAINMENT INTEGRATED LEAK RATE TEST - RETEST SCHEDULE

In accordance with 10CFR50.12(a)(2)(ii), Consumers Power Company requests an exemption from 10CFR50 Appendix J III.A.6(b) which states, "that if two consecutive periodic Type A tests fail to meet the applicable acceptance criteria in III.A.5(b), notwithstanding the periodic retest schedule of III.D, a Type A test shall be performed at each plant shutdown for refueling or approximately every 18 months, whichever occurs first, until two consecutive Type A tests meet the acceptance criteria in III.A.5(b) after which time the retest schedule specified in III.D may be resumed."

This exemption request is made such that the Type A retest schedule of Section III.D may be maintained at the Palisades Nuclear Plant. Type A tests performed in 1981 and 1986 did not meet the allowable acceptance criteria, and therefore the retest requirements of Section III.A.6(b) are applicable.

Appendix J establishes two types of tests utilizing separate criteria. The local leak rate tests (LLRT) (Type B and C) are performed during each refueling outage while the Containment Integrated Leak Rate Test (CILRT) (Type A) is only performed every three or four years. The local leak rate tests provide periodic surveillance of components, such as isolation valves or air lock seals. The CILRT is a measurement of the overall integrated leakage rate of the containment including testing of passive and structural components and verification of the adequacy of the local leak rate testing program.

Exceeding the allowable leak rate during the performance of a CILRT indicates that either a passive or structural component is leaking or that there is an inadequacy in the local leak rate test program. For leaking passive or structural components, the only test that could determine that the leak exists or had been terminated would be the CILRT. In the case of the local leak rate test program deficiency, the CILRT would serve as a means of verification or the program results.

Consumers Power Company has determined that the failure of the Palisades 1981 and 1986 "as-found" CILRTs was the direct result of Type B and C penalty additions and not the failure of a passive or structural component. Performing the CILRT more frequently, as is required by Section III.A.6(b), due to local leak rate test failures, would only result in confirming leakage that would otherwise be found during performance of local leak rate testing. Therefore, there is not a benefit to performing Type A, CILRT, testing more frequently.

Similarly, IE Information Notice 85-71 dated August 22, 1985 states, in part, "...if Type B and C leakage rates constitute an identified contributor to this failure of the "as-found" condition for the CILRT, the general purpose of maintaining a high degree of containment integrity might be better served through an improved maintenance and testing program for containment penetration boundaries and isolation valves. In this situation, the licensee may

submit a Corrective Action Plan with an alternative leakage test program proposal as an exemption request for NRC review."

Consumers Power Company is addressing the concern of excessive leakage observed during Type B and C testing through an aggressive "Local Leak Rate Testing - Corrective Action Plan," utilizing the guidance in IE Information Notice 85-71. The Local Leak Rate Testing - Corrective Action Plan was previously submitted by Consumers Power Company letter dated June 30, 1986 in response to IE Inspection Report 86-005, and is also attached hereto. The Corrective Action Plan, in summary, addresses:

1. Augmented LLRT Program - more frequent local leak rate testing.

2. Development and implemention of a detailed trending program to track penetration and valve performance.

3. Identification of valve type and manufacturer for historical performance comparison.

4. Recommendation and implementation of appropriate repair or replacement of containment isolation valves identified as historically poor performers (excessive leakage), utilizing the data obtained in Item 3.

10CFR50.12(a) indicates that the Commission may grant exemptions if special circumstances are present. One of the special circumstances presented in 50.12.(a)(2)(ii) is, "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." The underlying purpose of 10CFR50 Appendix J III.A.6(b) is to ensure unacceptable containment leakage is identified and corrected. Implementation of the Correction Action Plan will ensure this underlying purpose is met through the augmented LLRT program and an effective trending and maintenance program. Therefore, the provisions in 10CFR50.12(a)(2)(ii) for application for an exemption have been met.

ATTACHMENT 2

Consumers Power Company
Palisades Plant
Docket 50-255

LOCAL LEAK RATE TESTING

CORRECTIVE ACTION PLAN

August 22, 1986

4 Pages

AT0886-0130-NL02

Palisades Nuclear Plant

Local Leak Rate Testing (LLRT)

Corrective Action Plan

I. Problems:

A. During the 1978, 1981, 1984 and 1986 Refueling Outages, the Palisades LLRT Leakage exceeded .6 La.

B. Palisades failed the ILRT "as found" condition during the 1981 and 1986 refueling outages due to the excessive penalty addition from Type B and Type C testing.

II. Root Cause of Problem

A. Containment isolation valve leakage.

B. Inconsistent testing methodology.

C. Inability to trend penetration/valve performance.

III. Objectives of Corrective Action Plan

A. Determine through historical review which valves have contributed an excessive amount of leakage during the performance of LLRT.

B. Determine through historical review which valves have shown a history of minimal or no leakage.

C. Develop LLRT trending to track penetration/valve performance.

D. Determine and implement an appropriate method of instructing test personnel.

E. Ensure Operations personnel provide a comprehensive and timely review of all LLRT procedures.

IV. Corrective Action - LLRT Program

A. Augmented LLRT Program

1. During any forced outage greater than 30 days, perform LLRT on penetrations which trending program indicates could exceed penetration leak rate acceptance criteria.

B. Local Leak Rate Testing

2. Develop/Implement detailed trending program to track penetration/valve performance.

C. Identification of Valve Type/Valve Manufacturer

1. Identify valve type/valve manufacturer utilizing historical data of valves which have contributed an excessive amount of leakage during the performance of LLRTs.

2. Identify valve type/valve manufacturer utilizing historical data of valves which have shown a history of "minimal or no leakage" during the performance of LLRTs.

D. Correction of Problem Penetrations

1. Recommend/Implement effective repair/replacement methods on containment isolation valves identified as historically poor performers (excessive leakage) utilizing the data obtained in Item IV.C.1 & 2.

V. LLRT Method Improvement

A. Identify dedicated, cognizant Operations personnel to perform LLRTs.

B. Implement a thorough and complete Operations review of all LLRT procedures.

C. Review of LLRT procedures by LLRT engineer for testing methodology.

D. Initiate discussions with other utilities and INPO to benefit from their experience.

VI. Completion Schedule of Corrective Action Plan

Title	Item	Completion Date
Local Leak Rate Trending	IV.B.1	Completed June 2, 1986
Identification of Valve Type/Valve Manufacturer	IV.C.1, 2	October 31, 1986
Local Leak Rate Testing Method Improvement	V.A, B, C, D	December 31, 1986
Correction of Problem Penetrations	IV.D.1	December 31, 1987

VII. Integrated Leak Rate Test - 1988 Refueling Outage

A. Guidance given in IE Information Notice 85-71 indicates that an improved maintenance and test program for containment penetration boundaries and isolation valves could be an acceptable alternative to increasing the frequency of Type A tests.

In this regard, the aggressive actions listed above will ensure:

1. That positive steps are being taken to eliminate the excessive leakage from containment isolation valves found during the conduct of local leak rate testing.

2. During a forced outage greater than 30 days, selected penetrations, which through trending indicate the possibility of exceeding penetration leak rate acceptance criteria, will be tested.

B. Due to the current plant status of being in a forced outage greater than 30 days, we have addressed Item IV.A.1 by testing 14 penetrations identified by the trending program.

C. The Corrective Action Plan will assure that containment integrity is maintained via increased testing and trending. The resultant of the plan will ensure that in the event of an accident the dose levels do not exceed 10CFR100 limits. Therefore, this alternate improved maintenance and testing (Type B and C) plan can fulfill the requirements of increased frequency of Type A tests. An appropriate exemption request will be submitted regarding this issue.