Indiana Michigan
Power Company
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106
616-465-5901

INDIANA MICHIGAN POWER

October 27, 2000

C1000-19
10 CFR 50.90

Docket Nos.: 50-315
50-316

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop O-P1-17
Washington, DC 20555-0001

Donald C. Cook Nuclear Plant Units 1 and 2
CONTAINMENT LEAKAGE RATE TESTING EXEMPTION REQUEST
SUPPLEMENTAL INFORMATION
(TAC NOS. MA9867, MA9868, and MA9869)

Reference: Letter from M. W. Rencheck (I&M) to U. S. Nuclear Regulatory Commission (NRC) Document Control Desk, "Donald C. Cook Nuclear Plant Units 1 and 2, 10 CFR 50, Appendix J Exemption Request and Technical Specification Change Request – Containment Leakage Rate Testing," submittal C0900-11, dated September 1, 2000.

In the referenced letter, Indiana Michigan Power Company (I&M), the Licensee for Donald C. Cook Nuclear Plant (CNP) Units 1 and 2, requested relief from the requirement to perform a Type A containment leakage rate test prior to the startup of CNP Unit 1. Type A testing is required by Technical Specification (T/S) 4.6.1.2 due to the steam generator replacement, which is considered a modification to the containment barrier. I&M proposed crediting ASME Section XI in-service pressure testing to verify leak tightness of the steam generators and associated piping systems in lieu of Type A testing.

I&M has revised the proposed T/S changes for Unit 1 to reflect changes discussed with the NRC staff on October 24, 2000. The new marked up T/S pages and the proposed T/S pages with the changes incorporated are included in Attachments 1 and 2, respectively.

In a telephone conversation with Richard Lobel of the NRC staff on October 19, 2000, I&M discussed compliance with ASME Section XI requirements. The proposed change does not affect I&M's ability to meet all applicable code requirements. Station procedures contain additional

A047

Printed on recycled paper

requirements, including the evaluation of any leakage discovered during system pressure testing, beyond those of the ASME XI code. The requirements of 10 CFR 50.55a, "Codes and Standards," will continue to be met.

In addition, during a telephone conversation with your staff on September 29, 2000, the staff requested information regarding previous Unit 1 Type A test results. The test results are provided below:

Date	As-left leak rate (weight % per day)
September 1992	0.08300
June 1989	0.03330
August 1985	0.02247
July 1981	0.08813
May 1978	0.08114
November 1974 (pre-op)	0.17097

I&M has evaluated the information provided in this letter and concludes that the evaluation of significant hazards considerations contained in Attachment 4 of the referenced letter is not affected. There are no new commitments made in this submittal.

Should you have any questions, please contact me at (616) 697-5056.

Sincerely,

for Wayne J. Kropp

W. J. Kropp
Director of Regulatory Affairs

/jen

c: J. E. Dyer
MDEQ – DW & RPD
NRC Resident Inspector
R. Whale

ATTACHMENT 1 TO C1000-19

TECHNICAL SPECIFICATIONS PAGES
MARKED TO SHOW PROPOSED CHANGES

REVISED PAGES
UNIT 1

3/4 6-2

B 3/4 6-1

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Containment leakage rates shall be limited to:

a. An overall integrated leakage rate of $\leq L_a$, 0.25 percent by weight of the containment air per 24 hours at P_a, 12.0 psig, and

b. A combined leakage rate of $\leq 0.60\ L_a$ for all penetrations and valves subject to Types B and C tests when pressurized to P_a.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With either (a) the measured overall integrated containment leakage rate exceeding $0.75\ L_a$, or (b) with the measured combined leakage rate for all penetrations and valves subject to Types B and C tests exceeding $0.60\ L_a$, restore the overall integrated leakage rate to $\leq 0.75\ L_a$ and the combined leakage rate for all penetrations and valves subject to Types B and C tests to $\leq 0.60\ L_a$ prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.1.2 Perform leakage rate testing in accordance with 10 CFR 50 Appendix J Option B, except as modified by NRC-approved exemptions, and Regulatory Guide 1.163, dated September 1995. *

a. Each containment air lock shall be verified to be in compliance with the requirements of Specification 3.6.1.3.

b. The provisions of Specification 4.0.2 are not applicable.

* A one-time exception to the requirement to perform post-modification Type A testing is allowed for the steam generators and associated piping, as components of the containment barrier. For this case, ASME Section XI leak testing will be used to verify the leak tightness of the repaired or modified portions of the containment barrier. Entry into MODES 3 and 4 following the extended outage that commenced in 1997 may be made to perform this testing.

3/4.6.1 PRIMARY CONTAINMENT

Primary CONTAINMENT INTEGRITY ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the accident analysis. This restriction, in conjunction with the leakage-rate limitation, will limit the site boundary radiation doses to within the limits of 10 CFR 100 during accident conditions.

3/4 6.1.2 CONTAINMENT LEAKAGE

The limitations on containment leakage rates ensure that the total containment leakage volume will not exceed the value assumed in the accident analysis at the peak accident pressure, P_a. As an added conservatism, the measured overall integrated leakage rate is further limited to $\leq 0.75\ L_a$ during performance of the periodic tests to account for possible degradation of the containment leakage barriers between leakage tests.

The surveillance testing for measuring leakage rates are consistent with the requirements of Appendix "J" of 10 CFR 50, Regulatory Guide 1.163, dated September 1995, and Nuclear Energy Institute document NEI 94-01, except as modified.

3/4.6.1.3 CONTAINMENT AIR LOCKS

The limitations on closure and leak rate for the containment air locks are required to meet the restrictions on CONTAINMENT INTEGRITY and containment leak rate. Surveillance testing of the air lock seals provide assurance that the overall air lock leakage will not become excessive due to seal damage during the intervals between air lock leakage tests.

ATTACHMENT 2 TO C1000-19

PROPOSED TECHNICAL SPECIFICATIONS PAGES

REVISED PAGES
UNIT 1

3/4 6-2

B 3/4 6-1

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Containment leakage rates shall be limited to:

a. An overall integrated leakage rate of $\leq L_a$, 0.25 percent by weight of the containment air per 24 hours at P_a, 12.0 psig, and

b. A combined leakage rate of $\leq 0.60\ L_a$ for all penetrations and valves subject to Types B and C tests when pressurized to P_a.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With either (a) the measured overall integrated containment leakage rate exceeding $0.75\ L_a$, or (b) with the measured combined leakage rate for all penetrations and valves subject to Types B and C tests exceeding $0.60\ L_a$, restore the overall integrated leakage rate to $\leq 0.75\ L_a$ and the combined leakage rate for all penetrations and valves subject to Types B and C tests to $\leq 0.60\ L_a$ prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.1.2 Perform leakage rate testing in accordance with 10 CFR 50 Appendix J Option B, except as modified by NRC-approved exemptions, and Regulatory Guide 1.163, dated September 1995. *

a. Each containment air lock shall be verified to be in compliance with the requirements of Specification 3.6.1.3.

b. The provisions of Specification 4.0.2 are not applicable.

* A one-time exception to the requirement to perform post-modification Type A testing is allowed for the steam generators and associated piping, as components of the containment barrier. For this case, ASME Section XI leak testing will be used to verify the leak tightness of the repaired or modified portions of the containment barrier. Entry into MODES 3 and 4 following the extended outage that commenced in 1997 may be made to perform this testing.

3/4.6.1 PRIMARY CONTAINMENT

Primary CONTAINMENT INTEGRITY ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the accident analysis. This restriction, in conjunction with the leakage rate limitation, will limit the site boundary radiation doses to within the limits of 10 CFR 100 during accident conditions.

3/4 6.1.2 CONTAINMENT LEAKAGE

The limitations on containment leakage rates ensure that the total containment leakage volume will not exceed the value assumed in the accident analysis at the peak accident pressure, P_a. As an added conservatism, the measured overall integrated leakage rate is further limited to $\leq 0.75\ L_a$ during performance of the periodic tests to account for possible degradation of the containment leakage barriers between leakage tests.

The surveillance testing for measuring leakage rates are consistent with the requirements of Appendix "J" of 10 CFR 50, Regulatory Guide 1.163, dated September 1995, and Nuclear Energy Institute document NEI 94-01, except as modified

3/4.6.1.3 CONTAINMENT AIR LOCKS

The limitations on closure and leak rate for the containment air locks are required to meet the restrictions on CONTAINMENT INTEGRITY and containment leak rate. Surveillance testing of the air lock seals provide assurance that the overall air lock leakage will not become excessive due to seal damage during the intervals between air lock leakage tests.