

July 16, 1993

Docket Nos. 50-315
50-316

Mr. E. E. Fitzpatrick, Vice President
Indiana Michigan Power Company
c/o American Electric Power
Service Corporation
1 Riverside Plaza
Columbus, Ohio 43216

Dear Mr. Fitzpatrick:

SUBJECT: ISSUANCE OF EXEMPTION FROM REQUIREMENT OF 10 CFR 50, APPENDIX J, III.D.2(b)(ii) FOR DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2 (TAC NOS. M85271 AND M85272)

The U.S. Nuclear Regulatory Commission has granted the enclosed Exemption regarding a requirement in Appendix J, III.D.2(b)(ii) of 10 CFR Part 50 for Donald C. Cook Nuclear Plant, Units 1 and 2. The Exemption is granted in response to your letter dated December 21, 1992. The Exemption relieves Indiana Michigan Power Company from the requirements of conducting a full pressure air lock leakage test whenever air locks are opened during periods when containment integrity is not required by the Technical Specifications. The basis for this action is included in the enclosed Exemption.

We find that granting the Exemption is authorized by law, will not present an undue risk to the public health and safety, is consistent with the common defense and security, and meets the special circumstances described in 10 CFR 50.12(a)(2)(ii) and (iii).

A copy of the exemption is being forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by
William M. Dean, Sr., Acting Director
Project Directorate III-1
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Enclosure:
Exemption

cc w/enclosure:
See next page

OFFICE	LA:PD31	PE:PD31	PM:PD31	(A):D:PD31
NAME	CJamerson <i>CJ</i>	SLee <i>see previous comments</i>	BWetzel <i>see previous comments</i>	WMDean <i>WMD</i>
DATE	06/20/93	06/ /93	06/ /93	06/28/93
OFFICE	OGC <i>EHB</i>	AD:RIII <i>✓</i>	D:DRPW <i>JK</i>	
NAME	<i>E Holler</i>	JZwolinski	JRoe <i>JK</i>	
DATE	7/2/93	7/16/93	7/16/93	

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Mr. E. E. Fitzpatrick
Indiana Michigan Power Company

Donald C. Cook Nuclear Plant

cc:

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Department of Public Health
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Lansing, Michigan 48909

DISTRIBUTION for Cook Exemption Re: 10 CFR 50, Appendix J, III.D.2(b)(ii)

Dated: July 16, 1993

Docket File

NRC & Local PDRs

PDIII-1 Reading

T. Murley/F. Miraglia, 12-G-18

J. Partlow, 12-G-18

E. Rossi

J. Lieberman

J. Roe

J. Zwolinski

W. Dean

B. Wetzel

S. Lee

C. Jamerson

G. Hill (4)

OGC

E. Jordan, MNBB-3701

ACRS (10)

OC/LFDCB

OPA

W. Shafer, R-III

G. Grant, 17-G-21

cc: Plant Service list

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
INDIANA MICHIGAN POWER COMPANY)
(Donald C. Cook Nuclear Plant)
Units 1 and 2))

Docket Nos. 50-315
and 50-316

EXEMPTION

I.

Indiana Michigan Power Company (the licensee) is the holder of Facility Operating License Nos. DPR-58 and DPR-74 which authorize operation of the Donald C. Cook Nuclear Plant, Units 1 and 2 at steady-state reactor power levels not in excess of 3250 and 3411 megawatts thermal, respectively. The Donald C. Cook facilities are pressurized water reactors located at the licensee's site in Berrien County, Michigan. These licenses provide, among other things, that they are subject to all rules, regulations, and orders of the Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

II.

Paragraph III.D.2(b)(ii) of Appendix J of 10 CFR Part 50 requires, in part, that a full pressure air lock leakage test be performed whenever air locks are opened during periods when containment integrity is not required by the plant's Technical Specifications.

The NRC may grant exemptions from the requirements of the regulations which, pursuant to 10 CFR 50.12(a), (1) 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 December 21, 1992, the licensee requested an Exemption from the requirement of 10 CFR Part 50, Appendix J, III.D.2(b)(ii) identified in section II above, and substitution of an air lock door seal leakage test (Paragraph III.D.2(b)(iii) of Appendix J, 10 CFR Part 50) for the full pressure air lock test otherwise required by Paragraph III.D.2(b)(ii) when the air lock is opened while the reactor is in cold shutdown (Mode 5) or refueling (Mode 6), if no maintenance has been performed on the air lock that could affect its sealing capability. The exemption would also allow the door seal leakage rates test of III.D.2(b)(iii) to be used when the maintenance affecting the air locks sealing capability was performed only on the door gaskets. That is, door seal testing will be done after each opening, after maintenance which could affect the air lock door gaskets, and prior to establishing containment integrity. If maintenance that could affect sealing capability has been performed on an air lock, other than the door gaskets, a full pressure air lock test must still be performed.

If an air lock is opened during Modes 5 and 6, Paragraph III.D.2(b)(ii) of Appendix J requires that an overall air lock leakage test at not less than the calculated peak containment pressure from a design-basis LOCA (Pa) be conducted before plant heatup and startup (i.e., entering Mode 4). The existing air lock doors are so designed that a full-pressure (i.e., Pa = 47.0 psig) test of an entire air lock can only be performed after strongbacks (structural bracing) have been installed on the inner door. Strongbacks are needed because the pressure exerted on the inner door during the test is in a direction opposite to that of the accident pressure direction. Installing

strongbacks, performing the test, and removing strongbacks requires at least 8 hours per air lock (there are two air locks) during which access through the air lock is prohibited.

If the periodic 6-month test of paragraph III.D.2(b)(i) of Appendix J and the test required by paragraph III.D.2(b)(iii) of Appendix J are current, no maintenance (other than to door gaskets) has been performed on the air lock that could affect its sealing capability, and the air lock is properly sealed, there is no reason to expect the air lock to leak excessively just because it has been opened in Mode 5 and Mode 6.

Accordingly, the Commission concludes that the licensee's proposed approach of substituting the seal leakage test of paragraph III.D.2(b)(iii) for the pressure test of paragraph III.D.2(b)(iii) of Appendix J is acceptable following door gasket maintenance and/or prior to entering Mode 4. Furthermore, the licensee has committed to meet the requirements of paragraph III.D.2(b)(ii) of Appendix J whenever other maintenance that could affect sealing capability has been performed on the air lock.

The special circumstances for granting this exemption pursuant to 10 CFR 50.12 have also been identified. The purpose of paragraph III.D.2(b)(ii) is to ensure that air locks are properly sealed when containment integrity is required. The proposed alternative test method is sufficient to achieve this underlying purpose in that it provides adequate assurance of continued leak tight integrity of the air lock. Consequently, the special circumstances described by 10 CFR 50.12(a)(2)(ii) and (iii) exist in that application of the regulation in these particular circumstances is not necessary to achieve the underlying purpose of the rule in that the licensee has proposed an acceptable alternative test method that accomplishes the intent of the regulation.

Compliance would result in undue hardship that would be significantly in excess of that contemplated when the regulation was adopted in that plant startup would be delayed while an overall air lock leakage test was performed at full pressure. The effort and delay required is not warranted by the resulting safety benefit.

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) and (iii) are present justifying the exemption.

Therefore, the Commission hereby grants the exemption as described in Section III above from 10 CFR Part 50, Appendix J, III.D.2(b)(ii).

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this Exemption will have no significant impact on the environment (58 FR 35984).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY

John A. Zwolinski, Acting Director
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland
this 16th day of July *See previous concurrence

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NAME	CJamerson	SLee*	BWetzel	WDean*
DATE	07/ /93	06/25/93	07/15/93	06/28/93
OFFICE	OGC	AD:RIII	D:DRPW	
NAME	EHoller*	JZwolinski	JRoe	
DATE	07/02/93	07/16/93	07/16/93	