

April 22, 1994

Docket No. 50-316

Mr. E. E. Fitzpatrick, Vice President  
Indiana Michigan Power Company  
c/o American Electric Power Service Corporation  
1 Riverside Plaza  
Columbus, Ohio 43215

Dear Mr. Fitzpatrick:

SUBJECT: DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2 - ENVIRONMENTAL ASSESSMENT  
AND FINDING OF NO SIGNIFICANT IMPACT - SCHEDULAR EXEMPTION FROM  
10 CFR PART 50, APPENDIX J (TAC NO. M89025)

By letter dated March 9, 1994, as supplemented April 13, 1994, you requested a one-time schedular exemption, and associated technical specification amendment, for D. C. Cook, Unit 2, from the test intervals for Type B and C leak rate tests required by 10 CFR Part 50, Appendix J. The exemption and amendment were requested to increase the surveillance interval, a maximum of 150 days longer than that permitted by the regulations for Type B and C tests, in order to support the current refueling outage schedule and avoid the need for an earlier plant shutdown to perform these tests.

Enclosed is a copy of the staff's Environmental Assessment and Finding of No Significant Impact relating to this one-time schedular exemption.

This assessment is being forwarded to the Office of the Federal Register for publication.

Should you have any questions regarding this matter please call me at (301) 504-3017.

Sincerely,  
Original signed by  
John B. Hickman, Project Manager  
Project Directorate III-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Enclosure:  
Environmental Assessment

cc w/enclosure:  
See next page

9404270316 940422  
PDR ADDOCK 05000316  
P PDR

DISTRIBUTION

Docket File J. Hickman OPA  
NRC & Local PDRs C. Jamerson  
PD3-1 Rdg File L. Marsh  
J. Roe OGC  
J. Zwolinski E. Jordan  
ACRS (10) E. Greenman

OFFICE	LA:PD31	PM:PD31	OGC	PD:PDIII-1
NAME	CJamerson	JHickman:cir	<i>[Signature]</i>	LBMarsh FOR
DATE	04/19/94	04/19/94	04/20/94	04/22/94
COPY	Yes/No	Yes/No	Yes/No	Yes/No

OFFICIAL RECORD COPY FILENAME:G:\WPDOCS\DCCOOK\C089025.ENV

250000

NRC FILE CENTER COPY

DF01

Mr. E. E. Fitzpatrick  
Indiana Michigan Power Company

Donald C. Cook Nuclear Plant

cc:

Regional Administrator, Region III  
U.S. Nuclear Regulatory Commission  
801 Warrenville Road  
Lisle, Illinois 60532-4351

Mr. S. Brewer  
American Electric Power Service  
Corporation  
1 Riverside Plaza  
Columbus, Ohio 43215

Attorney General  
Department of Attorney General  
525 West Ottawa Street  
Lansing, Michigan 48913

Bill Franz (5)  
Environmental Review Coordinator  
77 West Jackson Boulevard  
Environmental Protection Agency  
Chicago, IL 60604-3590

Township Supervisor  
Lake Township Hall  
Post Office Box 818  
Bridgman, Michigan 49106

Al Blind, Plant Manager  
Donald C. Cook Nuclear Plant  
Post Office Box 458  
Bridgman, Michigan 49106

U.S. Nuclear Regulatory Commission  
Resident Inspector Office  
7700 Red Arrow Highway  
Stevensville, Michigan 49127

Gerald Charnoff, Esquire  
Shaw, Pittman, Potts and Trowbridge  
2300 N Street, N. W.  
Washington, DC 20037

Mayor, City of Bridgman  
Post Office Box 366  
Bridgman, Michigan 49106

Special Assistant to the Governor  
Room 1 - State Capitol  
Lansing, Michigan 48909

Nuclear Facilities and Environmental  
Monitoring Section Office  
Division of Radiological Health  
Department of Public Health  
3423 N. Logan Street  
P. O. Box 30195  
Lansing, Michigan 48909

December 1993

UNITED STATES NUCLEAR REGULATORY COMMISSIONINDIANA MICHIGAN POWER COMPANYD.C. COOK, UNIT NO. 2DOCKET NO. 50-316ENVIRONMENTAL ASSESSMENT AND FINDING OFNO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from the requirements of 10 CFR Part 50, Appendix J, III.D.2.(a) and III.D.3., related to Type B and C local leak rate testing of containment isolation valves, to the Indiana Michigan Power Company (the licensee), for operation of the D. C. Cook Nuclear Plant, Unit 2, located in Berrien County, Michigan.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action

The proposed action would grant a one-time schedular exemption from the requirements of Appendix J, paragraphs III.D.2.(a) and III.D.3 of 10 CFR Part 50 and approve an extension of the 2-year period between the performance of Type B and C leak rate test by 150 days. Appendix J to 10 CFR Part 50, paragraph III.D.2.(a), states, in part, "Type B tests, except tests for air locks, shall be performed during reactor shutdown for refueling, or other convenient intervals, but in no case at intervals greater than 2 years." Paragraph III.D.3., states, "Type C tests shall be performed during each reactor shutdown for refueling but in no case at intervals greater than 2 years." Taken together, these sections require Type B and C containment leakage tests to be performed at an interval not to exceed 2 years.

In a letter dated March 9, 1994, as supplemented April 13, 1994, the licensee requested an exemption to 10 CFR Part 50, Appendix J, to allow the time between the performance of the required Type B and C tests to exceed the 2-year maximum by up to 150 days.

#### The Need for the Proposed Action

The proposed exemption is needed because compliance with paragraphs III.D.2.(a) and III.D.3 of 10 CFR Part 50, Appendix J, would result in a unit shutdown and additional personnel radiation exposure in order to comply with the required Type B and C test frequency. The licensee last conducted the required Type B and C leak rate tests during a refueling outage in the spring of 1992. These previous leak rate tests will reach the 2-year maximum test interval imposed by Appendix J starting on May 29, 1994. The licensee's next refueling outage is scheduled to begin in August 1994. The extended interval between refueling outages is a result of an equipment problem and scheduling to avoid coincident refueling outages on both units. The exemption is requested to support the current outage schedule and to avoid the potential for an earlier 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. This action is similar to that approved for several other facilities.

#### Environmental Impact of the Proposed Action

The proposed action includes exemptions from performing Type B and C tests for a maximum period of 150 days beyond the required Appendix J test intervals. 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 paragraphs III.D.2.(a) and III.D.3 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 150-day extended period.

Past Unit 2 local leak rate test data have demonstrated improving leak rate test results. Although the As Found results for the 1989 and 1990 outages were  $3.0 L_a$  and  $0.74 L_a$ , respectively, which exceeded the maximum limit of  $0.6 L_a$ , the 1992 As Found was  $0.18 L_a$ . The improved 1992 As Found result, which was a minor increase from the 1990 As Left of  $0.17 L_a$ , followed several corrective actions by the licensee. The improving trend for the Type B and C testing, well below the allowable limit, provides reasonable assurance that the probability of exceeding the offsite dose rates established in 10 CFR Part 100 will not be increased by extending the current Type B and C testing for a maximum of 150 days.

Thus, radiological releases will not differ from those determined previously and the proposed exemption does not otherwise affect facility radiological effluent or occupational exposures. The proposed exemption will not increase the probability or consequences of any reactor accidents. The proposed exemption does not affect plant nonradiological effluents and has no other environmental impact. Therefore, the Commission concludes that there are no measurable radiological or nonradiological environmental impacts associated with the proposed exemption.

#### Alternatives to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested exemption and amendment and to require rigid compliance with the requirements of paragraphs III.D.2.(a) and III.D.3 of Appendix J to 10 CFR Part 50. Such action would not enhance the protection of the environment and would result in unjustified burdens and costs for the licensee and greater occupational exposure to plant personnel.

#### Alternative Use of Resources

This action does not involve the use of resources not previously considered in connection with the Commission's Final Environmental Statement for D.C. Cook, Units 1 and 2, dated August 1973.

#### Agencies and Persons Consulted

The staff consulted with the State of Michigan regarding the environmental impact of the proposed action. The State had no comments.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed exemption.

Based upon the foregoing environmental assessment, the staff concludes that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this proposed action, see the licensee's application and request for exemption dated March 9 and April 13, 1994. This document is available for public inspection at the Commission's Public Document Room, 2120 L Street, N.W., Washington, DC 20555, and at the local public document room located at the Maud Preston Palenske Memorial Library, 500 Market Street, St. Joseph, Michigan 49085.

Dated at Rockville, Maryland, this 22nd day of April 1994.

FOR THE NUCLEAR REGULATORY COMMISSION



John B. Hickman, Acting Director  
Project Directorate III-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation