

July 6, 1995

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

SUBJECT: DONALD C. COOK NUCLEAR PLANT, UNIT NO. 1 - ISSUANCE OF AMENDMENT RE:  
ONE TIME EXTENSION FOR THE TEST INTERVAL FOR A TYPE A CONTAINMENT  
LEAK TEST (TAC NO. M91853)

Dear Mr. Fitzpatrick:

The Commission has issued the enclosed Amendment No. 196 to Facility Operating License No. DPR-58 for the Donald C. Cook Nuclear Plant, Unit No. 1. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated March 17, 1995.

The amendment adds a footnote to TS 4.6.1.2.a to provide a one-time extension of the required test interval for overall integrated containment leak rate tests (Type A tests). This extension will allow the third Type A test of the second 10-year service period to be performed during the refueling outage that will follow the end of Cycle 15.

Concurrently, by separate correspondence the Commission has granted a one-time schedular exemption to allow an extension of one cycle for the performance of the 10 CFR Part 50, Appendix J, Type A test, provided that the general containment inspection is performed.

A copy of our related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by

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

Docket No. 50-315  
Enclosures: 1. Amendment No. 196 to DPR-58  
2. Safety Evaluation  
cc w/encl: See next page  
DISTRIBUTION: See Attached Page

DOCUMENT NAME: G:\WPDOCS\C091853.AMD \*See previous concurrence

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NAME	CJamerson		JHickman		CBerlinger for RBarrett		EHoller		CCarpenter	CAE
DATE	6/29/95		6/29/95		6/29/95		6/27/95		6/30/95	

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 196  
License No. DPR-58

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Indiana Michigan Power Company (the licensee) dated March 17, 1995, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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Mr. E. E. Fitzpatrick  
Indiana Michigan Power Company

Donald C. Cook Nuclear Plant

cc:

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3423 N. Logan Street  
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2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-58 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 196, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Attachment: Changes to the Technical  
Specifications

Date of Issuance: July 6, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 196  
TO FACILITY OPERATING LICENSE NO. DPR-58  
DOCKET NO. 50-315

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change.

REMOVE

3/4 6-2

INSERT

3/4 6-2

## CONTAINMENT SYSTEMS

### CONTAINMENT LEAKAGE

#### LIMITING CONDITION FOR OPERATION

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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 leakage rate(s) to within the limit(s) prior to increasing the Reactor Coolant System temperature above 200°F.

#### SURVEILLANCE REQUIREMENTS

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4.6.1.2 The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR 50 using the methods and provisions of ANSI N45.4-1972:

- a. Types A, B, and C (Overall Integrated and Local Combined Leakage Rate) testing shall be conducted in accordance with the requirements specified in Appendix J to 10 CFR 50, as modified by approved exemptions.†
- b. Each containment air lock shall be verified to be in compliance with the requirements of Specification 3.6.1.3.
- c. The provisions of Specification 4.0.2 are not applicable.

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† A one-time extension of the test interval is allowed for the third Type A test of the second 10-year service period originally scheduled to be performed at the end of Cycle 14. The test will be performed prior to unit restart following the refueling outage that will follow the end of Cycle 15.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 196 TO FACILITY OPERATING LICENSE NO. DPR-58

INDIANA MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 1

DOCKET NO. 50-315

1.0 INTRODUCTION

By letter dated March 17, 1995, the Indiana Michigan Power Company (the licensee) requested an amendment to the Technical Specifications (TS) appended to Facility Operating License No. DPR-58 for the Donald C. Cook Nuclear Plant, Unit No. 1. The proposed amendment would revise TS 4.6.1.2.a to provide a one-time extension of the required test interval for overall integrated containment leak rate tests (Type A tests).

TS 4.6.1.2.a requires that three Type A tests be conducted at 40 plus or minus 10-month intervals during each 10-year service period, and that the third test of each set of three be conducted during the shutdown for the 10-year plant inservice inspection. Part 50 of Title 10 of the Code of Federal Regulations (CFR), Appendix J, Section III.D.1, requires that a set of three approximately equally spaced Type A tests be performed during each 10-year service period, and that the third test of each set be conducted during the plant shutdown for the 10-year plant inservice inspection.

The licensee has proposed that the following be added to the TSs as a footnote to TS 4.6.1.2.a:

"A one-time extension of the test interval is allowed for the third Type A test of the second 10-year service period originally scheduled to be performed at the end of Cycle 14. The test will be performed prior to unit restart following the refueling outage that will follow the end of Cycle 15."

2.0 EVALUATION

The surveillance requirement in D.C. Cook TS 4.6.1.2 currently states:

"The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR 50 using the methods and provisions of ANSI N45.4-1972:

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- a. Types A, B, and C (Overall Integrated and Local Combined Leakage Rate) testing shall be conducted in accordance with the requirements specified in Appendix J to 10 CFR 50, as modified by approved exemptions."

These tests are performed to assure that leakage through the primary reactor containment and systems and components penetrating primary containment shall not exceed allowable leakage rate values as specified in the TS and to assure that periodic surveillance of reactor containment penetrations and isolation valves is performed so that proper maintenance and repairs are conducted.

The licensee has stated that the results from the last three Type A tests demonstrate the as-found leakage rates were well below the acceptance limits established in 10 CFR Part 50, Appendix J and the TS. Appendix J and the TS require that the as-found leak rate be less than  $L_a$  (0.25 wt%/day) and that the as-left leak rate be less than 75% of  $L_a$  (0.8716 wt%/day). The as-found leak rates for the last three Type A tests were 0.10567, 0.05550, and 0.08716 wt%/day, respectively. The results of these Type A tests showed that the integrated leakage of primary containment was less than 50 % of the allowable leak rate, including penalties associated with the Type B and C testing program. In addition, for the last 3 tests the contribution of Type B and C test penalties to the as-found leak rate was 81%, 49%, and 9%, respectively. These results demonstrate the licensee's efforts in limiting containment penetration leak rates over the past 10 years. These Type B and C tests will continue to be performed at the frequency required by the TS with repairs being performed as necessary. The demonstrated operability of these penetrations will provide added assurance that overall containment leakage remains satisfactory.

The licensee also indicated that the general visual inspection of all accessible interior surfaces of the steel liner plate and exterior surfaces of the containment concrete wall, required by TS to be performed prior to a Type A test, will still be performed during the 1995 refueling outage. The purpose of this inspection is to detect any evidence of structural deterioration (corrosion or deformation of the steel liner and spalling and cracking of the concrete) which may affect the containment structural integrity or its leak tightness.

Modifications which could alter the containment structure are subject to the licensee's 10 CFR 50.59 review process and any unplanned modifications to the containment prior to the next scheduled Type A test would be subject to the special testing requirements of 10 CFR Part 50, Appendix J, Section IV.A. However, no modifications to the containment boundary are planned for 1995 or 1996.

Based on the past Type A test results, the continued Type B and C testing, and the visual inspection to be performed, the staff finds that the proposed amendment for a one-time extension of the required test interval for Type A tests would not adversely affect plant safety and is, therefore, acceptable.

Concurrently, by separate correspondence, the Commission has granted a one-time schedular exemption to allow an extension of one cycle for the performance of the 10 CFR Part 50, Appendix J, Type A test, provided that the general containment inspection is performed.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Michigan State official was notified of the proposed issuance of the amendments. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (60 FR 20519). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

### 5.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: John Hickman

Date: July 6, 1995

DATED: July 6, 1995

AMENDMENT NO. 196 TO FACILITY OPERATING LICENSE NO. DPR-58-D. C. COOK-UNIT 1

Docket File

PUBLIC

PDIII-1 Reading

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