



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

March 19, 1996

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 NOS. 1 AND 2 - ISSUANCE OF  
 AMENDMENTS RE: 10 CFR PART 50, APPENDIX J, OPTION B AND ASSOCIATED  
 RELIEF REQUEST (TAC NOS. M94328 AND M94329)

Dear Mr. Fitzpatrick:

The Commission has issued the enclosed Amendment No. 209 to Facility Operating License No. DPR-58 and Amendment No. 193 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2. The amendments consist of changes to the Technical Specifications in response to your application dated December 19, 1995, and supplemented February 16, 1996.

The amendments modify the technical specifications to replace the existing scheduling requirements for overall integrated and local containment leakage rate testing with a requirement to perform the testing in accordance with 10 CFR Part 50, Appendix J, Option B. Option B allows test scheduling to be adjusted based on past performance.

The February 16, 1996, letter also requested an alternative to the leakage testing requirements of the 1983 Edition of the ASME *Boiler and Pressure Vessel Code* (the Code), Section XI, Paragraph IWV-3420, for the D.C. Cook containment isolation valves included in the inservice testing program. The alternative to the ASME Code requirements is necessary to fully implement the Appendix J option, as the 1983 Edition of the Code does not differentiate between containment isolation valves and other valves that have a leak-tight safety function.

The staff has reviewed the request and determined that it is acceptable to use a portion of the most recent edition of the ASME Code incorporated by reference in 10 CFR 50.55a (i.e., the 1989 Edition) which references Part 10 of the ASME/ANSI 1987 *Operations and Maintenance Standards* for inservice testing of valves. This approval is pursuant to 10 CFR 50.55a(f)(4)(iv) with the application of the modification specified in paragraph (b)(2)(vii) of Section 50.55a for the analysis of leakage rates and corrective actions in the event leakage exceeds the acceptance criteria, which you stated will continue to be met.

Option B of 10 CFR Part 50, Appendix J, provides that a licensee may, if it so chooses, implement a performance-based containment isolation valve leak rate testing program. The provisions of Option B allow that for certain valves, the local leakage rate testing (referred to as Type C testing in Appendix J) need not be performed every refueling outage. Use of the later edition of the ASME Code is necessary because containment isolation valves are specifically

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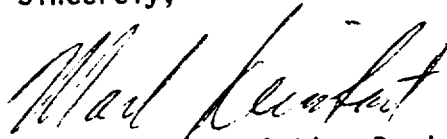
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addressed in Part 10, referring the user to Appendix J for the leakage testing requirements for the containment isolation function. Part 10 does not specify a frequency for leakage testing the containment isolation valves. Valves that have a dual function (i.e., an additional leak-tight function other than containment isolation, such as pressure isolation valves) are to be tested in accord with the ASME Code. Therefore, this approval would not supersede any leak-tight safety function test requirement applicable to the subject valves.

By letter dated October 25, 1974, the Commission granted, pursuant to 10 CFR Part 50, Appendix J, an exemption allowing D.C. Cook to conduct containment air lock tests after each opening at least once per 3 days when the lock is being used for multiple entries. This exemption is no longer applicable in that the regulation for which the exemption was issued was revised on September 22, 1980 (45 FR 62789), thus allowing 3 days between air lock tests during periods of frequent use, and thereby eliminating the need for the exemption as the exemption was no longer necessary for D.C. Cook to meet the underlying purpose of the regulation.

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,



Mark Reinhart, Acting Project Director  
Project Directorate III-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

Enclosures: 1. Amendment No. 209 to DPR-58  
2. Amendment No. 193 to DPR-74  
3. Safety Evaluation

cc w/encl: See next page

E. E. Fitzpatrick

- 2 -

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By letter dated October 25, 1974, the Commission granted, pursuant to 10 CFR Part 50, Appendix J, an exemption allowing D.C. Cook to conduct containment air lock tests after each opening at least once per 3 days when the lock is being used for multiple entries. This exemption is no longer applicable in that the regulation for which the exemption was issued was revised on September 22, 1980 (45 FR 62789), thus allowing 3 days between air lock tests during periods of frequent use, and thereby eliminating the need for the exemption as the exemption was no longer necessary for D.C. Cook to meet the underlying purpose of the regulation.

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:

Mark Reinhart, Acting Project Director  
Project Directorate III-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

Enclosures: 1. Amendment No. 209 to DPR-58  
2. Amendment No. 193 to DPR-74  
3. Safety Evaluation

cc w/encl: See next page

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NAME	CJamerson		JHickman		CBerlinger	RWeisman		ETOLCOR	JHannon
DATE	2/29/96		2/29/96		3/5/96	3/8/96		3/18/96	3/17/96

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\*Signature Block Change to reflect Project Director Signature

addressed in Part 10, referring the user to Appendix J for the leakage testing requirements for the containment isolation function. Part 10 does not specify a frequency for leakage testing the containment isolation valves. Valves that have a dual function (i.e., an additional leak-tight function other than containment isolation, such as pressure isolation valves) are to be tested in accord with the ASME Code. Therefore, this approval would not supersede any leak-tight safety function test requirement applicable to the subject valves.

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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,



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

Docket Nos. 50-315 and 50-316

Enclosures: 1. Amendment No. to DPR-58  
2. Amendment No. to DPR-74  
3. Safety Evaluation

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DATED: March 19, 1996

AMENDMENT NO. 209 TO FACILITY OPERATING LICENSE NO. DPR-58-D. C. COOK-UNIT 1  
AMENDMENT NO. 193 TO FACILITY OPERATING LICENSE NO. DPR-74-D. C. COOK-UNIT 2

Docket File

PUBLIC

PDIII-1 Reading

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C. Grimes, O-11F23

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Donald C. Cook Nuclear Plant

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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. 209  
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 December 19, 1995, and supplemented February 16, 1996, 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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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. 209, 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, with full implementation within 45 days.

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: March 19, 1996



ATTACHMENT TO LICENSE AMENDMENT NO. 209  
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  
3/4 6-4  
3/4 6-5  
3/4 6-9  
3/4 6-9a

INSERT

3/4 6-2  
3/4 6-4  
3/4 6-5  
3/4 6-9  
3/4 6-9a

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS  
3/4.6 CONTAINMENT SYSTEMS

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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 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.

**3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS**  
**3/4.6 CONTAINMENT SYSTEMS**

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**CONTAINMENT AIR LOCKS**

**LIMITING CONDITION FOR OPERATION**

3.6.1.3 Each containment air lock shall be OPERABLE with:

- a. Both doors closed except when the air lock is being used for normal transit entry and exit through the containment, then at least one air lock door shall be closed, and
- b. An overall air lock leakage rate of  $\leq 0.05 L_a$  at  $P_a$ , 12 psig.

**APPLICABILITY:** MODES 1, 2, 3 and 4.

**ACTION:**

With an air lock inoperable, restore the air lock to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

**SURVEILLANCE REQUIREMENTS**

4.6.1.3 Each containment air lock shall be demonstrated OPERABLE:

- a. In accordance with 10 CFR 50 Appendix J Option B and Regulatory Guide 1.163, dated September 1995, and
- b. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

**3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS**  
**3/4.6 CONTAINMENT SYSTEMS**

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**3/4.6    CONTAINMENT SYSTEMS**

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**CONTAINMENT STRUCTURAL INTEGRITY**

**LIMITING CONDITION FOR OPERATION**

3.6.1.6            The structural integrity of the containment shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.6. |

**APPLICABILITY:**        MODES 1, 2, 3 and 4.

**ACTION:**

With the structural integrity of the containment not conforming to the above requirements, restore the structural integrity to within the limits prior to increasing the Reactor Coolant System temperature above 200°F. |

**SURVEILLANCE REQUIREMENTS**

4.6.1.6            The structural integrity of the containment structure and steel liner shall be determined in accordance with 10 CFR 50 Appendix J Option B and Regulatory Guide 1.163, dated September 1995. |

**3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS**  
**3/4.6 CONTAINMENT SYSTEMS**

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**CONTAINMENT VENTILATION SYSTEM**

**LIMITING CONDITION FOR OPERATION**

- 3.6.1.7 The containment purge supply and exhaust system shall be closed except when operation of the containment purge system is required for pressure control, ALARA, and respirable air quality considerations for personnel entry, and for surveillance testing and maintenance activities. No more than one purge supply path and one purge exhaust path shall be open at a time.

**APPLICABILITY:** MODES 1, 2, 3, and 4.

**ACTION:**

- a. With one containment purge supply and/or one exhaust isolation valve inoperable, isolate the affected penetration by use of at least one automatic valve secured in the closed position, and, within 72 hours, either:
  - 1) Restore the inoperable valve to OPERABLE status, or,
  - 2) Deactivate the automatic valve secured in the closed position.
- b. Operation may then continue until performance of the next required valve test provided that the automatic valve secured in the closed position is verified to be deactivated in the closed position at least once per 31 days.
- c. Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- d. The provisions of Specification 3.0.4 are not applicable.

**SURVEILLANCE REQUIREMENTS**

- 4.6.1.7.1 The surveillance requirements of Technical Specifications 3/4.6.1.2 and 3/4.6.3.1 apply.



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

INDIANA MICHIGAN POWER COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 193  
License No. DPR-74

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Indiana Michigan Power Company (the licensee) dated December 19, 1995, and supplemented February 16, 1996, 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.

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-74 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 193, 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, with full implementation within 45 days.

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: March 19, 1996



ATTACHMENT TO LICENSE AMENDMENT NO. 193

FACILITY OPERATING LICENSE NO. DPR-74

DOCKET NO. 50-316

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  
3/4 6-4  
3/4 6-5  
3/4 6-9  
3/4 6-9a

INSERT

3/4 6-2  
3/4 6-4  
3/4 6-5  
3/4 6-9  
3/4 6-9a

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS  
3/4.6 CONTAINMENT SYSTEMS

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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 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 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.

**3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS**  
**3/4.6 CONTAINMENT SYSTEMS**

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**CONTAINMENT AIR LOCKS**

**LIMITING CONDITION FOR OPERATION**

- 3.6.1.3 Each containment air lock shall be OPERABLE with:
- a. Both doors closed except when the air lock is being used for normal transit entry and exit through the containment, then at least one air lock door shall be closed, and
  - b. An overall air lock leakage rate of  $\leq 0.05 L_a$  at  $P_a$ , 12.0 psig.

**APPLICABILITY:** MODES 1, 2, 3 and 4.

**ACTION:**

With an air lock inoperable, maintain at least one door closed; restore the air lock to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

**SURVEILLANCE REQUIREMENTS**

- 4.6.1.3 Each containment air lock shall be demonstrated OPERABLE:
- a. In accordance with 10 CFR 50 Appendix J Option B and Regulatory Guide 1.163, dated September 1995, and
  - b. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.