December 13, 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 NOS. 1 AND 2 - ISSUANCE OF AMENDMENTS RE: MAIN STEAM LINE ISOLATION VALVE MANUAL ACTUATION SYSTEM SURVEILLANCE FREQUENCY (TAC NOS. M92492 AND M92493)

Dear Mr. Fitzpatrick:

The Commission has issued the enclosed Amendment No. 204 to Facility Operating License No. DPR-58 and Amendment No. 189 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 (TS) in response to your application dated May 25, 1995.

The amendments change the surveillance frequency for the manual actuation function for main steam line isolation from monthly to quarterly.

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 Nos. 50-315 and 50-316

Enclosures: 1. Amendment No. 204 to DPR-58
2. Amendment No. 189 to DPR-74
3. Safety Evaluation

cc w/encl: See next page

DOCUMENT NAME: G:\WPDOCS\DCCOOK\C092492.AMD

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	LA:PD31	E	PM:PD31	E	BC:SPLB		OGC		(A)D:PD31	N
NAME	CJamerson		JHickman:db		CMcCracken				BHolian	
DATE	11/8/95		11/14/95		11/16/95		11/29/95		12/8/95	

OFFICIAL RECORD COPY

cc:

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

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

Township Supervisor
Lake Township Hall
P.O. Box 818
Bridgman, Michigan 49106

Al Blind, Plant Manager
Donald C. Cook Nuclear Plant
1 Cook Place
Bridgman, Michigan 49106

U.S. Nuclear Regulatory Commission
Resident Inspector's 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

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

DATED: December 13, 1995

AMENDMENT NO. 204 TO FACILITY OPERATING LICENSE NO. DPR-58-D. C. COOK-UNIT 1
AMENDMENT NO. 189 TO FACILITY OPERATING LICENSE NO. DPR-74-D. C. COOK-UNIT 2

Docket File
PUBLIC
PDIII-1 Reading
J. Roe
B. Holian
C. Jamerson
J. Hickman (2)
OGC
G. Hill, IRM (4)
C. Grimes, O-11F23
ACRS
W. Kropp, RIII
SEDB

cc: Plant Service list

180049

DF01

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. 204
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 May 25, 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.

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. 204 , 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: December 13, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 204

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	INSERT
3/4 3-33b	3/4 3-33b
3/4 3-34	3/4 3-34

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
9. Manual					
a. Safety Injection (ECCS) Feedwater Isolation Reactor Trip (SI) Containment Isolation-Phase "A" Containment Purge and Exhaust Isolation Auxiliary Feedwater Pumps Essential Service Water System	N.A.	N.A.	N.A.	R	1, 2, 3, 4
b. Containment Spray Containment Isolation-Phase "B" Containment Purge and Exhaust Isolation Containment Air Recirculation Fan	N.A.	N.A.	N.A.	R	1, 2, 3, 4
c. Containment Isolation-Phase "A" Containment Purge and Exhaust Isolation	N.A.	N.A.	N.A.	R	1, 2, 3, 4
d. Steam Line Isolation	N.A.	N.A.	Q	R	1, 2, 3

TABLE 4.3-2 (Continued)

TABLE NOTATION

(1) Deleted

(2) Each train or logic channel shall be tested at least every other 31 days.

(3) The CHANNEL FUNCTIONAL TEST shall include exercising the transmitter by applying either a vacuum or pressure to the appropriate side of the transmitter.

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. 189
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 May 25, 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.

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. 189 , 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: December 13, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 189

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	INSERT
3/4 3-32	3/4 3-32
3/4 3-32a	--
3/4 3-33	3/4 3-33

TABLE 4.3-2 (Continued)
ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	MODES IN WHICH SURVEILLANCE REQUIRED
7. TURBINE DRIVEN AUXILIARY FEEDWATER PUMP					
a. Steam Generator Water Level -- Low-Low	S	R	M	N.A.	1, 2, 3
b. Reactor Coolant Pump Bus Undervoltage	N.A.	R	M	N.A.	1, 2, 3
8. LOSS OF POWER					
a. 4 kv Bus Loss of Voltage	S	R	M	N.A.	1, 2, 3, 4
b. 4 kv Bus Degraded Voltage	S	R	M	N.A.	1, 2, 3, 4
9. MANUAL					
a. Safety Injection (ECCS) Feedwater Isolation Reactor Trip (SI) Containment Isolation - Phase "A" Containment Purge and Exhaust Isolation Auxiliary Feedwater Pumps Essential Service Water System	N.A.	N.A.	N.A.	R	1, 2, 3, 4
b. Containment Spray Containment Isolation - Phase "B" Containment Purge and Exhaust Isolation Containment Air Recirculation Fan	N.A.	N.A.	N.A.	R	1, 2, 3, 4
c. Containment Isolation - Phase "A" Containment Purge and Exhaust Isolation	N.A.	N.A.	N.A.	R	1, 2, 3, 4
d. Steam Line Isolation	N.A.	N.A.	Q	R	1, 2, 3

TABLE 4.3-2 (Continued)

TABLE NOTATION

(1) Deleted

(2) Each train or logic channel shall be tested at least every other 31 days.

(3) The CHANNEL FUNCTIONAL TEST shall include exercising the transmitter by applying either a vacuum or pressure to the appropriate side of the transmitter.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 204 TO FACILITY OPERATING LICENSE NO. DPR-58

AND AMENDMENT NO. 189 TO FACILITY OPERATING LICENSE NO. DPR-74

INDIANA MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-315 AND 50-316

1.0 INTRODUCTION

By letter dated May 25, 1995, the Indiana Michigan Power Company (the licensee) requested amendments to the Technical Specifications (TS) appended to Facility Operating License Nos. DPR-58 and DPR-74 for the Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2. The proposed amendments would modify TS Table 4.3-2 to change the surveillance frequency for the manual actuation function for main steam line isolation. The surveillance frequency would be changed from monthly to quarterly.

2.0 EVALUATION

The design of the main steam isolation valves (MSIVs) at Cook includes a piston which is attached to the valve stem. The steam above and below the piston is normally at line pressure. The cylinder volume above the piston is piped through a three-way valve into a pair of redundant, air operated dump valves. Upon receipt of a signal to close, the dump valves open and vent the steam from the cylinder. The steam pressure in the valve body below the piston forces the piston to move rapidly and close the valve.

Due to the nature of this design the manual switch for MSIV actuation constitutes an open/close control for the dump valve (there are two switches per MSIV, one for each dump valve, eight total). When it is switched, the dump valve opens, causing the MSIV to close. As a result, the manual actuation for the MSIV is different from the other Engineered Safety Feature Actuation Systems (ESFAS) manual functions in that it bypasses the Solid State Protection System. Therefore, the functional testing of the manual ESFAS steamline isolation function is just a stroke test of the dump valves. Currently, the Cook TS require functional testing of the manual actuation function for the MSIVs on a monthly basis. To perform this testing, the three-way valve is positioned to isolate one dump valve at a time. One manual switch is tested at a time to ensure the dump valve opens. This manual actuation is the same as quarterly tests done per ASME Section XI.

The licensee has proposed to change the required MSIV surveillance from monthly to quarterly. The licensee provided the following justification for the change:

1. Based on previous test data, the system has proven itself to be reliable. Since 1988, over 1,300 tests have been conducted, with only 3 failures. These failures involved minor mechanical problems and were corrected expeditiously. Furthermore, the last such failure occurred in October 1991, indicating over 3 years of testing without failure. The excellent performance record of this system gives us confidence that quarterly testing is sufficient.

2. The change achieves consistency between the ASME Section XI requirements for the dump valves and the T/S required testing.

3. In February 1994, unit 2 tripped due to closure of one of the MSIVs. The trip occurred following return of a dump valve to service following maintenance to correct seat leakby. The dump valve actuator had been improperly recoupled to the valve, which ultimately resulted in closure of the MSIV.

   Following the trip...[the licensee]...concluded that monthly testing of the dump valves was not only unnecessary, but also risky for several reasons: (1) each cycling of the dump valve avails the valve to seat damage. This damage can then lead to seat leakby and subsequent maintenance which requires an LCO entry and involves further plant jeopardy; (2) test history has identified numerous incidents of MSIVs drifting off of their full open seats during testing; and (3) excessive leakage past the three-way valve could cause the MSIV to close, tripping the unit.

The staff has reviewed the licensee's considerations and agrees that the current testing is unnecessarily frequent. The proposed test frequency is consistent with, or more frequent, than the requirements approved for other facilities and the improved Standard Technical Specifications Westinghouse Plants, NUREG-1431. Based on the above, the proposed change in surveillance frequency is acceptable.

The licensee has also proposed to delete a footnote associated with the MSIV channel functional test surveillance requirement. The footnote currently states that "Manual actuation switches shall be tested at least once per 18 months during shutdown. All other circuitry associated with manual safeguards actuation shall receive a CHANNEL FUNCTIONAL TEST at least once per 31 days." As previously stated, the channel functional test is initiated with the manual switch. Since the manual switches are tested as part of the channel functional test, the footnote is unnecessary and the deletion is acceptable.

Finally, the licensee has proposed to delete a footnote on page 3/4 3-32 of Unit 2's TS which related to surveillance extensions for a past outage. Since the outage has been completed and the extensions are no longer applicable, the staff finds this administrative change to remove an obsolete footnote acceptable.

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 amendments change surveillance requirements. The staff has determined that the amendments involve 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 amendments involve no significant hazards consideration and there has been no public comment on such finding (60 FR 35081). Accordingly, the amendments meet 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 amendments.

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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: John B. Hickman, NRR

Date: December 13, 1995