May 2, 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 NO. 2 - ISSUANCE OF AMENDMENT RE: CONTROL ROD POSITION INDICATOR CHANNELS DURING SHUTDOWN (TAC NO. M94945)

Dear Mr. Fitzpatrick:

The Commission has issued the enclosed Amendment No. 194 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit No. 2. The amendment consists of changes to the Technical Specifications in response to your application dated March 12, 1996.

The amendment removes the technical specifications related to shutdown and control rod position indication while in modes 3, 4, and 5.

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. 50-316

Enclosures: 1. Amendment No. 194 to DPR-74
2. Safety Evaluation

cc w/encl: See next page

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

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cc w/encl: See next page

cc:

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Mr. S. Brewer
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DATED: May 2, 1996

AMENDMENT NO. 194 TO FACILITY OPERATING LICENSE NO. DRP-74-D. C. COOK-UNIT 2

Docket File
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W. Kropp, R-III
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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. 194
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 March 12, 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.

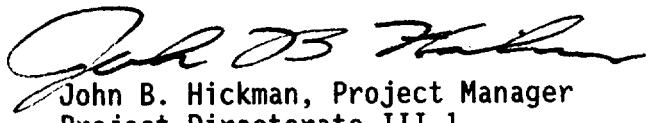
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-74 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 194 , 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: May 2, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 194

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
IV	IV
3/4 1-22	3/4 1-22
3/4 10-5	3/4 10-5
B 3/4 10-1	B 3/4 10-1

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3/4.10.1 SHUTDOWN MARGIN

This special test exception provides that a minimum amount of control rod worth is immediately available for reactivity control when tests are performed for control rod worth measurement. This special test exception is required to permit the periodic verification of the actual versus predicted core reactivity condition occurring as a result of fuel burnup or fuel cycling operations.

3/4.10.2 GROUP HEIGHT, INSERTION, AND POWER DISTRIBUTION LIMITS

This special test exception permits individual control rods to be positioned outside of their normal group heights and insertion limits during the performance of such PHYSICS TESTS as those required to 1) measure control rod worth and 2) determine the reactor stability index and damping factor under xenon oscillation conditions.

3/4.10.3 PHYSICS TESTS

This special test exception permits PHYSICS TESTS to be performed at less than or equal to 5% of RATED THERMAL POWER and is required to verify the fundamental nuclear characteristics of the reactor core and related instrumentation.

3/4.10.4 REACTOR COOLANT LOOPS

This special test exception permits reactor criticality under no flow conditions and is required to perform certain startup and PHYSICS TESTS while at low THERMAL POWER levels.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 194 TO FACILITY OPERATING LICENSE NO. DPR-74

INDIANA MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2

DOCKET NO. 50-316

1.0 INTRODUCTION

By letter dated March 12, 1996, the Indiana Michigan Power Company (the licensee) requested an amendment to the Technical Specifications (TS) appended to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit No. 2. The proposed amendment would remove the TS related to shutdown and control rod position indication while in modes 3, 4, and 5.

2.0 EVALUATION

Currently TS 3/4.1.3.3 for Cook Unit 2, requires that at least one rod position indicator channel (excluding demand position indication) shall be OPERABLE for each shutdown or control rod not fully inserted, in modes 3, 4, and 5. In addition, TS 3/4.10.5 for Cook Unit 2, suspends the requirements of 3/4.1.3.3 for the purpose of performing rod drop time measurement with specific appropriate limitations. There are no similar requirements on Unit 1. The licensee has proposed to delete TS 3/4.1.3.3 and TS 3/4.10.5 entirely. The proposed deletion is based on rod position indication not being required because adequate shutdown margin is maintained by boration, and that no similar requirements are included in either the Unit 1 TS or in NUREG-1431, Rev. 1, "Standard Technical Specifications Westinghouse Plants."

The licensee has stated that in modes 3, 4, and 5, the boron concentration in the reactor coolant system is increased to ensure that adequate shutdown margin is achieved and maintained in accordance with existing Cook Nuclear Plant TS. The calculation used to obtain the required boron concentration takes into account the relative position of the control and shutdown rods. Strict procedural controls are in place at Cook Nuclear Plant to ensure that an all rods out shutdown margin is maintained during rod position indicator calibration.

The staff has stated previously that boron concentration is adequate to ensure shutdown margin in modes 3, 4, and 5. The Standard Technical Specifications Westinghouse Plants, NUREG-1431, Rev. 1, dated April 1995, which dropped the requirement for rod position indication during modes 3, 4, and 5 contained in the earlier version of the Standard Technical Specification for Westinghouse

Pressurized Water Reactors, addressed rod position indication in shutdown modes as follows:

> "In shutdown MODES, the OPERABILITY of the shutdown and control banks has the potential to affect the required SDM [shutdown margin], but this effect can be compensated for by an increase in the boron concentration of the Reactor Coolant System."

Section 50.36 of Title 10 of the Code of Federal Regulations established the regulatory requirements related to the content of TS. The rule requires that TS include items in specific categories, including safety limits, limiting conditions for operation, and surveillance requirements. The rule specifies that limiting conditions for operation (and associated surveillances) are to be included in a plant's TS if the item meets one or more of the following criteria: (1) an installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary, (2) a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier, (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier, or (4) a structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. Operability of the shutdown and control rod position indication does not affect the ability of the plant to be shut down and therefore is not required by 50.36.

The staff's review of the proposed change determined that the deletion of the TS related to shutdown and control rod position indication while in modes 3, 4, and 5 does not change the licensee's ability to safely shut down the reactor. Although the rod position indication requirement is eliminated, adequate shutdown capability is maintained by boration as required by TS 3/4.1.1 and strict procedural controls are in place to ensure that an all rods out shutdown margin is maintained during rod position indication calibration.

Based on the above staff position, the licensee procedural controls, that inclusion of the requirements in TS is not specifically required by 10 CFR 50.36 or other regulations, and adequate controls are provided by other TS, the deletion of the operability and surveillance requirements for the control rod position indication during shutdown, contained in TS 3/4.1.3.3, is acceptable.

TS 3/4.10.5 is a Special Test Exception which provides that the limitations of TS 3/4.1.3.3 may be suspended during the performance of individual full length rod drop time measurements. The test exception included certain provisoes that were satisfied by surveillance requirements 4.10.5.1 and 4.10.5.2. With the deletion of TS 3/4.1.3.3, this test exception and associated surveillances and bases are no longer required and therefore the deletion of 3/4.10.5 is acceptable. A typographical error of the word "PHYSICS" in Bases 3/4.10.3 has also been corrected.

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 a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and 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 (61 FR 13527). 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 B. Hickman, NRR

Date: May 2, 1996