

MAR 30 1976

Docket No. 50-315

Indiana & Michigan Electric Company  
Indiana & Michigan Power Company  
ATTN: Mr. John Tillinghast  
Vice President  
P. O. Box 18  
Bowling Green Station  
New York, New York 10004

Gentlemen:

In response to your requests of October 15, 1975, and March 19, 1976, the Commission has issued Amendment No. 12 to Facility Operating License DPR-58. Amendment No. 12 authorizes operation of the Donald C. Cook Nuclear Plant, Unit 1, at steady state reactor core power levels not in excess of 2925 megawatts thermal (90% of rated power). It also authorizes completion of power startup testing at reactor core power levels up to and including 3250 megawatts thermal (100% of rated power). These authorizations are effective only until such time as the reactor is next refueled at which time, unless the Commission has taken further licensing action with respect to authorized power level, the authorized power level will be 2632.5 megawatts thermal (81% of rated power). A signed copy of the amendment is enclosed. Also enclosed is a copy of a related notice that has been sent to the Office of the Federal Register for filing and publication.

The amendment includes revisions to the Technical Specifications made in conformance with the recommendations of Supplement No. 5 to the Safety Evaluation Report, as supplemented by the evaluation given below.

As was noted in Section 5.2 of Supplement No. 5, the staff believed that the allowable peaking factor based on the LOCA-ECCS analysis "will be 1.98 when the analyses are performed with the amended evaluation model that has been approved by the staff." The staff has reviewed the material submitted in Amendment 69 of the final Safety Analysis Report, which includes a reanalysis of the most limiting break based on the approved model. In the reanalysis, a peak clad temperature of 2200 F was calculated for the worst break (double-ended cold leg guillotine with C = 0.8). The calculated maximum local metal/water reaction was 7.6% and the total core-wide metal/water reaction was less than 0.3%. These calculated values are at or below the limits specified in Section 50.46 of 10 CFR Part 50.

~~AD:RS  
DRoss  
3/30/76~~

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SURNAME	MServino	KKniel	STRIDIRON	VAM by telephone	RDeYoung	RBoyd
DATE	3/29/76	3/29/76	3/30/76	3/30/76	3/30/76	3/30/76

The results are based on a Region 2 fuel rod with a burnup of 8377 MWD/MTU which includes the benefit of reduced initial fuel rod temperature that would occur at this burnup. This fuel condition is expected to be limiting for operation beyond January 18, 1976.

The analysis was based on a total peaking factor of 1.98 (without rod bow) and an  $F_{NHE}$  of 1.51 at rated power (3250 Mwt). The Technical Specifications have been revised to reflect these peaking factor values as Limiting Conditions for Operation.

Based on the staff's review, we conclude that the LOCA analyses that were performed are wholly in conformance with the requirements of Appendix K to 10 CFR Part 50. We also conclude, based on the staff's review and consideration of the license restrictions noted below, that the ECCS cooling performance conforms to the peak clad temperature and maximum oxidation and hydrogen generation criteria of Section 50.46 of 10 CFR Part 50.

As was noted in Section 5.2 of Supplement No. 5, the LOCA-ECCS analyses were performed only for four-loop operation. Therefore, the amended license includes a condition that denies authorization to operate D. C. Cook Unit 1 with one or more idle reactor coolant loops.

As was noted in Section 5.4 of Supplement No. 5, there was not, at the time the Supplement was prepared, adequate assurance that certain valve failures would not result in loss of core cooling capability following a LOCA. The staff concluded that certain identified valves should have their electric power removed during normal operation, and that an operating staff member be specifically designated to restore power to five of these valves following LOCA upon direction from the control room. In addition, the staff noted in Section 5.5 of the Supplement that the switchover time from cold leg to simultaneous hot and cold leg injection should be changed from 24 hours after a LOCA to 20 hours in order to provide margin against excessive boric acid concentration in the core. The Office of Inspection and Enforcement has since found that the operating procedures you have prepared to enable accomplishment of lockout and restoration of power and to reflect a switchover time of 20 hours are acceptable.

Both the staff, in its Supplement No. 5 to the Safety Evaluation Report, and the Advisory Committee on Reactor Safeguards (Committee), in its report of March 11, 1976 to the Commission, concluded that the D. C.

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Cook Nuclear Plant, Unit 1 can be operated safely at powers up to rated power. However, in light of the concerns expressed in the Committee's report, the staff and you concurred in limiting the authorized power level to 90% of rated power until further licensing action is taken to change that power level. Before such further licensing action is taken, the Commission intends to publish an additional Supplement to the Safety Evaluation Report that addresses the matters discussed in the Committee's report.

We have considered your request to be permitted to complete the power startup testing program, including operation at rated power, and to perform steam generator moisture carryover tests. We believe that early completion of the program will provide operating data that will be valuable to the Commission in any further licensing action. However, an amendment to the operating license is not required to perform steam generator moisture carryover tests. In light of the staff's conclusions in Supplement No. 5 to the Safety Evaluation Report and those of the Committee in its March 11, 1976 report, we conclude that operation at steady state power levels up to 90% of rated power and operation for completion of the startup testing program at steady state power levels up to rated power can be performed without undue risk to the health and safety of the public.

Amendment No. 12 to DPR-58 includes a revised issuance of Technical Specifications Appendix A. The issuance of these revised Technical Specifications was reviewed and concurred in by your staff. The revisions are addressed in the enclosed staff Safety Evaluation.

The staff has concluded, based on the considerations discussed above and in the enclosed Safety Evaluation that: (1) because the amendment does not involve a significant increase in the probability or consequences of an accident, and does not involve a significant decrease in a safety margin, the change does not involve a significant hazards consideration; (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; and (3) such operation will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

The staff has determined that this amendment does not authorize a change in effluent types or total amounts nor an increase in power level to a level above that considered in the Final Environmental Statement issued in August 1973 and will not result in any significant

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Indiana & Michigan Electric Company  
Indiana & Michigan Power Company -4-

environmental impact. Having made this determination, the staff has concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR 51.5(d) (4) that an environmental statement, negative declaration or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Sincerely,

Signed by  
Roger S. Boyd

Roger S. Boyd, Director  
Division of Project Management  
Office of Nuclear Reactor Regulation

Enclosures:

1. License Amendment
2. Federal Register Notice
3. Staff Safety Evaluation

ccs:

Listed on Following page

OFFICE →						
SURNAME →						
DATE →						

ccs w/encl:  
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Division of Intergovernmental Relations  
Executive Office of the Governor  
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State Board of Health  
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Indianapolis, Indiana 46206

Mr. Wade Schuler, Supervisor  
Lake Township  
Baroda, Michigan 49101

Mr. W. Mabry, Mayor  
City of Bridgman  
Michigan 49104

Mr. Gary Williams  
Federal Activities Branch  
Environmental Protection Agency  
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Mr. Sheldon Meyers  
Attn: Mr. Jack Anderson  
Office of Federal Activities  
Environmental Protection Agency  
401 M Street, S. W.  
Washington, D. C. 20460

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Executive Director of Civil Works  
Office of the Chief of Engineers  
Corps of Engineers  
Department of the Army  
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Mr. Bruce Blanchard  
Office of Environmental Projects Review  
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INDIANA AND MICHIGAN ELECTRIC COMPANY

INDIANA AND MICHIGAN POWER COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT, UNIT 1

FACILITY OPERATING LICENSE

License No. DPR-58  
Amendment No. 12

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by Indiana and Michigan Electric Company and Indiana and Michigan Power Company (the licensees) dated October 15, 1975, and March 19, 1976, comply 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. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.
2. Facility Operating License No. DPR-58, issued to the Indiana and Michigan Electric Company and Indiana and Michigan Power Company, is hereby amended in its entirety to read as follows:

AD:PM  
DeYoung  
3/30/76

*[Handwritten signature]*

OFFICE	PM:LWR 2	PM:LWR 2	PM:LWR	OELD	EEVAM	DPM
SURNAME	MBERVICE	RBenedict	KKniel	STRIDIRON	by telephone	RBoyd
DATE	3/27/76	3/23/76	3/29/76	3/30/76	3/30/76	3/30/76

- A. This amended license applies to the Donald C. Cook Nuclear Plant, Unit 1, a pressurized water nuclear reactor and associated equipment (the facility), owned by the Indiana and Michigan Electric Company and the Indiana and Michigan Power Company. The facility is located in Berrien County, Michigan, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 12 through 69), and the Environmental Report as supplemented and amended (Supplements 1 through 3).
- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Indiana and Michigan Electric Company and Indiana and Michigan Power Company:
- (1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use and operate the facility at the designated location in Berrien County, Michigan, in accordance with the procedures and limitations set forth in this license;
  - (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
  - (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
  - (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components;
  - (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

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C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensees are authorized to operate the Donald C. Cook Nuclear Plant, Unit 1, at steady state reactor core power levels not to exceed 2632.5 megawatts thermal (81 percent of rated power) except that, until such time as the reactor is next refueled, or the Commission amends this license with respect to the authorized power level, the licensees are authorized (a) to operate Donald C. Cook Nuclear Plant, Unit 1, at steady state reactor core power levels not to exceed 2925 megawatts thermal (90 percent of rated power), and (b) to operate Donald C. Cook Nuclear Plant, Unit 1, at steady state reactor core power levels not to exceed 3250 megawatts thermal (100 percent of rated power) as required for completion of the startup testing program described in the Donald C. Cook Nuclear Plant Final Safety Analysis Report.

(2) Technical Specifications

The Technical Specifications contained in Appendix A (as revised and attached hereto) and Appendix B (as revised) are hereby incorporated in this license. The licensees shall operate the facility in accordance with the Technical Specifications, as revised.

(3) Less than Four Loop Operation

The licensees shall not operate the reactor at power levels above P-7 (as defined in Table 3.3-1 of Specification 3.3.1.1 of Appendix A to this license) with less than four reactor coolant loops in operation until (a) safety analyses for less than four loop operation have been submitted, and (b) approval for less than four loop operation at power levels above P-7 has been granted by the Commission by amendment of this license.

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- D. The licensees shall maintain in effect and fully implement all provisions of the NRC Staff-approved physical security plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). The approved security plan consists of proprietary documents, collectively titled, "Donald C. Cook Nuclear Plant Industrial Security Plan," as follows:

Original, submitted with letter dated August 15, 1972, with revisions dated September 21, 1972, January 22, 1973, November 27, 1973, May 24, 1974, November 13, 1974, and November 14, 1975.

- E. Before engaging in an operational activity not evaluated by the Commission, the licensees will evaluate the environmental effects of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the Final Environmental Statement, the licensees shall provide a written evaluation of such activities and obtain prior approval of the Director, Office of Nuclear Reactor Regulation for the activities.

- F. This amended license is subject to the following additional condition for the protection of the environment:

The licensees will comply with appropriate water quality standards in accordance with Federal, State, and local regulations (including changes as required by the Federal Water Pollution Control Act Amendments of 1972).

- 3. This amended license is effective as of the date of issuance and shall expire March 25, 2009.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by  
Roger S. Boyd

Roger S. Boyd, Director  
Division of Project Management  
Office of Nuclear Reactor Regulation

Enclosure:  
Appendix A to Technical Specifications

Date of Issuance:

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UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-315

INDIANA AND MICHIGAN ELECTRIC COMPANY

INDIANA AND MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNIT 1

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 12 to Facility Operating License No. DPR-58 issued to Indiana and Michigan Electric Company and Indiana and Michigan Power Company for operation of the Donald C. Cook Nuclear Plant, Unit 1, located in Berrien County, Michigan. This amendment is effective as of its date of issuance.

The amendment increases the authorized power at which the Donald C. Cook Nuclear Plant, Unit 1, may be operated to 2925 megawatts thermal (90 percent of rated power). It also authorizes completion of power startup testing at reactor core power levels up to and including 3250 megawatts thermal (100 percent of rated power). These authorizations are effective only until such time as the reactor is next refueled, at which time, unless the Commission has taken further licensing action with respect to authorized power level, the authorized power level will be 2632.5 megawatts thermal (81 percent of rated power).

With this amendment, the Technical Specifications, Appendix A. have been revised to reflect the requirements resulting from reanalysis of

OFFICE →	PM:LWR 2	PM:LWR 2 CAB	PM:LWR 2	OELD ✓	EPV/AM
SURNAME →	MService	RBenedict	KKniel	STRIDIRON	by telephone
DATE →	3/24/76	3/29/76	3/29/76	3/30/76	3/30/76

emergency core cooling capability in accordance with Section 50.46 of 10 CFR Part 50 and to provide updated Technical Specifications equivalent in scope and content to those being issued in other licensing actions. The Technical Specifications, Appendix A, have been reissued in toto.

The applications for the amendment comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings required by the Act and the Commission's rules and regulations in 10 CFR Chapter I. These findings are set forth in the license amendment. Prior public notice of this amendment is not required because the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental statement, negative declaration or environmental impact appraisal need not be prepared in connection with issuance of this amendment.

The basis for this licensing action is contained in NRC Safety Evaluation Report Supplement No. 5 on this subject issued in January 1976, and in the letter dated March 30, 1976, from the Office of Nuclear Reactor Regulation to the licensees.

The Commission is also considering issuance of an amendment to Facility Operating License DPR-58 that would increase the authorized reactor core power level at which the Donald C. Cook Nuclear Plant, Unit 1, may be

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operated to 3250 megawatts thermal (100 percent of rated power). Prior to such action, however, the Commission intends to publish an additional Supplement to the Safety Evaluation Report. This Supplement will address the matters discussed in the March 11, 1976 report to the Commission by the Advisory Committee on Reactor Safeguards (the Committee). The Committee's report presented the results of the Committee's review of the proposed increase in full term authorized power level for the Donald C. Cook Nuclear Plant, Unit 1, to 100 percent of rated power.

For further details with respect to these actions, see (1) the applications for amendment dated October 15, 1975, and March 19, 1976, (2) Supplement No. 5 to the Safety Evaluation Report, (3) March 11, 1976 report to the Commission by the Advisory Committee on Reactor Safeguards, (4) Amendment No. 12 to Facility Operating License DPR-58 with the Commission's related Safety Evaluation, and (5) the letter dated March 30, 1976, from the Office of Nuclear Reactor Regulation to the licensees. These documents are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Maude Preston Palenske Memorial Library, 500 Market Street, St. Joseph, Michigan 49085. A copy of items (2), (3), (4) and (5) and of the additional Supplement to the Safety Evaluation Report, when issued, may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Project Management.

Dated at Bethesda, Maryland, this 30th day of March 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by

K. Kniel

Marl Kniel, Chief  
 Light Water Reactors Branch 2  
 Division of Project Management

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

INDIANA AND MICHIGAN ELECTRIC COMPANY

INDIANA AND MICHIGAN POWER COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT, UNIT 1

FACILITY OPERATING LICENSE

License No. DPR-58  
Amendment No. 12

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The applications for amendment by Indiana and Michigan Electric Company and Indiana and Michigan Power Company (the licensees) dated October 15, 1975, and March 19, 1976, comply 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. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.
2. Facility Operating License No. DPR-58, issued to the Indiana and Michigan Electric Company and Indiana and Michigan Power Company, is hereby amended in its entirety to read as follows:

- A. This amended license applies to the Donald C. Cook Nuclear Plant, Unit 1, a pressurized water nuclear reactor and associated equipment (the facility), owned by the Indiana and Michigan Electric Company and the Indiana and Michigan Power Company. The facility is located in Berrien County, Michigan, and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 12 through 69), and the Environmental Report as supplemented and amended (Supplements 1 through 3).
- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Indiana and Michigan Electric Company and Indiana and Michigan Power Company:
- (1) Pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use and operate the facility at the designated location in Berrien County, Michigan, in accordance with the procedures and limitations set forth in this license;
  - (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
  - (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
  - (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components;
  - (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

- C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensees are authorized to operate the Donald C. Cook Nuclear Plant, Unit 1, at steady state reactor core power levels not to exceed 2632.5 megawatts thermal (81 percent of rated power) except that, until such time as the reactor is next refueled or the Commission amends this license with respect to the authorized power level, the licensees are authorized (a) to operate Donald C. Cook Nuclear Plant, Unit 1, at steady state reactor core power levels not to exceed 2925 megawatts thermal (90 percent of rated power) and (b) to operate Donald C. Cook Nuclear Plant, Unit 1, at steady state reactor core power levels not to exceed 3250 megawatts thermal (100 percent of rated power) as required for completion of the startup testing program described in the Donald C. Cook Nuclear Plant Final Safety Analysis Report.

(2) Technical Specifications

The Technical Specifications contained in Appendix A (as revised and attached hereto) and Appendix B (as revised) are hereby incorporated in this license. The licensees shall operate the facility in accordance with the Technical Specifications, as revised.

(3) Less than Four Loop Operation

The licensees shall not operate the reactor at power levels above P-7 (as defined in Table 3.3-1 of Specification 3.3.1.1 of Appendix A to this license) with less than four reactor coolant loops in operation until (a) safety analyses for less than four loop operation have been submitted, and (b) approval for less than four loop operation at power levels above P-7 has been granted by the Commission by amendment of this license.

- D. The licensees shall maintain in effect and fully implement all provisions of the NRC Staff-approved physical security plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). The approved security plan consists of proprietary documents, collectively titled, "Donald C. Cook Nuclear Plant Industrial Security Plan," as follows:

Original, submitted with letter dated August 15, 1972, with revisions dated September 21, 1972, January 22, 1973, November 27, 1973, May 24, 1974, November 13, 1974, and November 14, 1975.

- E. Before engaging in an operational activity not evaluated by the Commission, the licensees will evaluate the environmental effects of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the Final Environmental Statement, the licensees shall provide a written evaluation of such activities and obtain prior approval of the Director, Office of Nuclear Reactor Regulation for the activities.

- F. This amended license is subject to the following additional condition for the protection of the environment:

The licensees will comply with appropriate water quality standards in accordance with Federal, State, and local regulations (including changes as required by the Federal Water Pollution Control Act Amendments of 1972).

3. This amended license is effective as of the date of issuance and shall expire March 25, 2009.

FOR THE NUCLEAR REGULATORY COMMISSION



Roger S. Boyd, Director  
Division of Project Management  
Office of Nuclear Reactor Regulation

Enclosure:  
Appendix A to Technical Specifications

Date of Issuance:

MAR 30 1976

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-315

INDIANA AND MICHIGAN ELECTRIC COMPANY

INDIANA AND MICHIGAN POWER COMPANY

DONALD C. COOK NUCLEAR PLANT, UNIT 1

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The amendment increases the authorized power at which the Donald C. Cook Nuclear Plant, Unit 1, may be operated to 2925 megawatts thermal (90 percent of rated power). It also authorizes completion of power startup testing at reactor core power levels up to and including 3250 megawatts thermal (100 percent of rated power). These authorizations are effective only until such time as the reactor is next refueled, at which time, unless the Commission has taken further licensing action with respect to authorized power level, the authorized power level will be 2632.5 megawatts thermal (81 percent of rated power).

With this amendment, the Technical Specifications, Appendix A, have been revised to reflect the requirements resulting from reanalysis of

emergency core cooling capability in accordance with Section 50.46 of 10 CFR Part 50 and to provide updated Technical Specifications equivalent in scope and content to those being issued in other licensing actions. The Technical Specifications, Appendix A, have been reissued in toto.

The applications for the amendment comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings required by the Act and the Commission's rules and regulations in 10 CFR Chapter I. These findings are set forth in the license amendment. Prior public notice of this amendment is not required because the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental statement, negative declaration or environmental impact appraisal need not be prepared in connection with issuance of this amendment.

The basis for this licensing action is contained in NRC Safety Evaluation Report Supplement No. 5 on this subject issued in January 1976, and in the letter dated March 30, 1976, from the Office of Nuclear Reactor Regulation to the licensees.

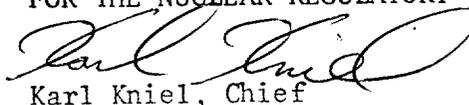
The Commission is also considering issuance of an amendment to Facility Operating License DPR-58 that would increase the authorized reactor core power level at which the Donald C. Cook Nuclear Plant, Unit 1, may be

operated to 3250 megawatts thermal (100 percent of rated power). Prior to such action, however, the Commission intends to publish an additional Supplement to the Safety Evaluation Report. This Supplement will address the matters discussed in the March 11, 1976 report to the Commission by the Advisory Committee on Reactor Safeguards (the Committee). The Committee's report presented the results of the Committee's review of the proposed increase in full term authorized power level for the Donald C. Cook Nuclear Plant, Unit 1, to 100 percent of rated power.

For further details with respect to these actions, see (1) the applications for amendment dated October 15, 1975, and March 19, 1976, (2) Supplement No. 5 to the Safety Evaluation Report, (3) March 11, 1976 report to the Commission by the Advisory Committee on Reactor Safeguards, (4) Amendment No. 12 to Facility Operating License DPR-58 with the Commission's related Safety Evaluation, and (5) the letter dated March 30, 1976, from the Office of Nuclear Reactor Regulation to the licensees. These documents are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Maude Preston Palenske Memorial Library, 500 Market Street, St. Joseph, Michigan 49085. A copy of items (2), (3), (4) and (5) and of the additional Supplement to the Safety Evaluation Report, when issued, may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Project Management.

Dated at Bethesda, Maryland, this 30th day of March 1976.

FOR THE NUCLEAR REGULATORY COMMISSION



Karl Kniel, Chief  
Light Water Reactors Branch 2  
Division of Project Management