

DEC 20 1974

Docket No. 50-315

Indiana and Michigan Electric Company  
Indiana and Michigan Power Company  
ATTN: Mr. John A. Tillinghast  
Vice President

P. O. Box 18  
Bowling Green Station  
New York, New York 10004

Gentlemen:

The Commission has amended Facility Operating License DPR-58 to permit operation of the Donald C. Cook Nuclear Plant, Unit 1, for power generation at steady state reactor core power levels not to exceed 2632.5 megawatts thermal (81% of rated thermal power) in accordance with the provisions of the license and Technical Specifications. A signed copy of the amendment is enclosed. A copy of a related notice which has been forwarded to the Office of the Federal Register for filing and publication is also enclosed.

The amendment includes revisions to the Technical Specifications which permit operation of the facility until November 1, 1975 without installation of the instrumentation that monitors condenser cooling water temperature and which prohibit operation of the facility with the reactor critical or with reactor coolant boron concentration less than 1800 ppm until you have been advised in writing by the Directorate of Licensing that the Directorate of Regulatory Operations has found that the installation of feedwater piping restraints and steam jet impingement barriers have been satisfactorily completed. Those changes do not involve any significant hazards consideration because (a) monitoring of the condenser cooling water temperature does not have any safety implication and (b) the reactor is considered to be shut down so long as it is subcritical and its coolant contains at least 1800 ppm boron and any feedwater or steam line failure while the reactor is in such condition will not present any danger to the health and safety of the public; nor will it result in (i) any significant increase in the probability of an accident or (ii) a significant increase in the consequences of an accident or (iii) a significant decrease in a safety margin.

Sincerely,

*[Original Signed by]*

Karl Kniel, Chief  
Light Water Reactors Branch 2-2  
Directorate of Licensing

SEE PREVIOUS YELLOW FOR CONCURRENCES *Const 2*

Enclosures: As stated	AD/LWR 2	LWR 2-2	EGC	AD/EP	LWR 262
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SURNAME >	12/20/74	12-17-74	12-20-74	12/20/74	12-18-74
DATE >					

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Lake Township  
Baroda, Michigan 49101

Mr. W. Mabry, Mayor  
City of Bridgman, Michigan 49106

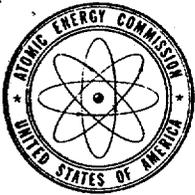
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Technology Assessment Division  
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UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

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. 1

1. The Atomic Energy Commission (the Commission) having found that:
  - A. The application for license filed by Indiana and Michigan Electric Company and Indiana and Michigan Power Company (the licensees) 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 and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the Donald C. Cook Nuclear Plant, Unit 1 (facility) has been substantially completed in conformity with Construction Permit No. CPPR-60 and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
  - E. The licensee is technically and financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;

- F. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
  - G. The issuance of this amended license will not be inimical to the common defense and security or to the health and safety of the public;
  - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Amendment No. 1 to Facility Operating License No. DPR-58 is in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements have been satisfied; and
  - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Part 30, 40, and 70, including 10 CFR Section 30.33, 40.32, 70.23, and 70.31.
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 60), 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 Part 30, to receive, possess and use at any time 100 millicuries each of any byproduct material without restriction to chemical or physical form, for sample analysis or instrument calibration;
  - (5) Pursuant to the Act and 10 CFR Parts 40 and 70, to receive, possess and use at any time 100 milligrams each of any source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration;
  - (6) 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 facility at steady state reactor core power levels not in excess of 2632.5 megawatts thermal (81% of rated power).

(2) Technical Specifications

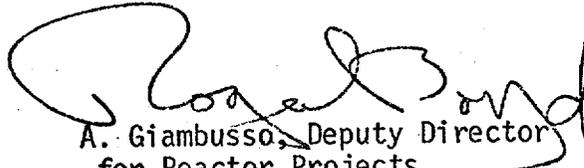
The Technical Specifications contained in Appendices A and B issued on October 25, 1974, as revised, are hereby incorporated in this license. The licensees shall operate the facility in accordance with the Technical Specifications as revised through Change No. 1. A copy of Change No. 1 is attached to this amendment.

- D. This license is subject to the following additional conditions for the protection of the environment:

The licensee 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).

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

FOR THE ATOMIC ENERGY COMMISSION

  
A. Giambusso, Deputy Director  
for Reactor Projects  
Directorate of Licensing

Date of Issuance: December 20, 1974

Enclosure:  
Change No. 1 to Technical  
Specifications

CHANGE NO. 1

to

TECHNICAL SPECIFICATIONS

DPR-58

- a. To Item 2 of Technical Specification 2.1.1.3 contained in Appendix B, add the following sentence:

The alarm instrumentation is to be installed not later than November 1, 1975.

- b. To Section 3/4.7, "Plant Systems" of the Technical Specifications contained in Appendix A, add the following paragraph: 3/4.7.8, "Completion of Pipe Restraints and Impingement Barriers:

3/4.7.8 Completion of Pipe Restraints and Impingement Barriers

Operation of the facility with the reactor critical or with reactor coolant boron concentration less than 1800 ppm shall not occur until the licensees have been advised by the Directorate of Licensing in writing, that the Directorate of Regulatory Operations has found that the installation of feedwater piping restraints and steam jet impingement barriers has been satisfactorily completed.

UNITED STATES ATOMIC ENERGY 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. Atomic Energy Commission (the Commission) has issued Amendment No. 1 to Facility Operating License No. DPR-58 issued to Indiana and Michigan Electric Company and Indiana and Michigan Power Company. The amendment is effective as of its date of issuance.

The amendment permits operation of the facility at steady state reactor core power levels not to exceed 2632.5 megawatts (81% of the rated thermal power) in accordance with the provisions of the license and the Technical Specifications. The Commission had determined, as discussed in the staff's Safety Evaluation dated September 10, 1973, that reactor operation at power levels exceeding 81% should not be undertaken until operating experience demonstrates to the staff's satisfaction that the maximum linear power density will not exceed that for which the accident analyses had been made.

The amendment also revises the Technical Specifications contained in Appendix B to the license to permit operation of the facility before certain alarms are installed on the instrumentation

that monitors condenser cooling water temperatures. The alarms, not presently available, are to be installed not later than November 1, 1975.

The amendment also revises the Technical Specifications contained in Appendix A to the license to permit only subcritical operation of the reactor until installation of certain piping restraints and impingement barriers is complete.

For further details with respect to this action, see Amendment No. 1 to License DPR-58. Amendment No. 1 is available for public inspection at the Commission's Public Document Room, 1717 H Street, NW, Washington, D. C., and at the St. Joseph Public Library, 500 Market Street, St. Joseph, Michigan 49085. A copy of Amendment No. 1 may be obtained upon request addressed to the U.S. Atomic Energy Commission, Washington, D. C. 20545, Attention: Deputy Director for Reactor Projects, Directorate of Licensing - Regulation.

Dated at Bethesda, Maryland, this <sup>20<sup>th</sup></sup> day of December 1974.

FOR THE ATOMIC ENERGY COMMISSION



Karl Kniel, Chief  
Light Water Reactors Branch 2-2  
Directorate of Licensing