



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

MAR 16 1978

Docket No. 50-316

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:

SUBJECT: ISSUANCE OF AMENDMENT NO. 3 - DONALD C. COOK NUCLEAR PLANT,  
UNIT NO. 2

The Commission has issued the enclosed Amendment No. 3 to Facility Operating License No. DPR-74 for the Donald C. Cook Nuclear Plant, Unit No. 2. This amendment authorizes Mode 1 operation not to exceed 678 megawatts thermal (twenty percent of rated core power level of 3391 megawatts thermal).

Copies of the related Safety Evaluation and Notice of Issuance are also enclosed.

Sincerely,

A handwritten signature in black ink, appearing to read "Roger S. Boyd", written over the typed name.

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

Enclosures:

1. Amendment No. 3 to License No. DPR-74
2. Safety Evaluation
3. Notice of Issuance

ccs w/encls:  
See page 2

Indiana and Michigan Electric Company  
Indiana and Michigan Power Company

- 2 -

MAR 16 1978

cc: Mr. R. W. Jurgensen  
Chief Nuclear Engineer  
American Electric Power  
Service Corporation  
2 Broadway  
New York, New York 10004

Gerald Charnoff, Esquire  
Shaw, Pittman, Potts & Trowbridge  
1800 M Street, N. W.  
Washington, D. C. 20006

Mr. David Dinsmore Comey  
Executive Director  
Citizens for a Better Environment  
59 East Van Buren Street  
Chicago, Illinois 60605

Executive Office of the Governor  
Division of Intergovernmental Relations  
Lewis Cass Building, 2nd Floor  
Lansing, Michigan 49813

State Board of Health  
ATTN: Director, Bureau of Engraving  
1330 West Michigan Street  
Indianapolis, Indiana 46206

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

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

Chief, Energy Systems  
Analyses Branch (AW-459)  
Office of Radiation Programs  
U. S. Environmental Protection Agency  
Room 645, East Tower  
401 M Street, S. W.  
Washington, D. C. 20460

U. S. Environmental Protection  
Agency  
Federal Activities Branch  
Region V Office  
ATTN: EIS Coordinator  
230 South Dearborn Street  
Chicago, Illinois 60604

Mr. Bert Lindenfeld  
Herald-Palladium  
Michigan and Oak Streets  
Benton Harbor, Michigan 49022



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

INDIANA AND MICHIGAN ELECTRIC COMPANY  
INDIANA AND MICHIGAN POWER COMPANY

DOCKET NO. 50-316

DONALD C. COOK NUCLEAR PLANT, UNIT NO. 2

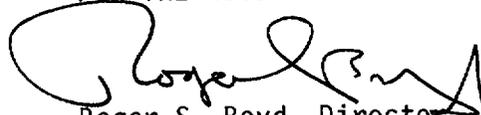
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 3  
License No. DPR-74

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The issuance of this license amendment is in compliance 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 license, as amended, 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, Facility Operating License No. DPR-74 is amended to authorize Mode 1 operation not to exceed 678 megawatts thermal (twenty percent of rated core power level, 3391 megawatts thermal). Written approval of the Commission is required prior to operation at greater than 678 megawatts thermal.
3. This amendment deletes condition 2.C(3)(s) of Facility Operating License No. DPR-74.

4. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Roger S. Boyd", is written over the typed name below.

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

Date of Issuance: March 16, 1978



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

SAFETY EVALUATION BY THE OFFICE OF

NUCLEAR REACTOR REGULATION

AMENDMENT 3 TO DPR-74

INDIANA AND MICHIGAN POWER COMPANY  
INDIANA AND MICHIGAN ELECTRIC COMPANY

DONALD C. COOK NUCLEAR PLANT UNIT 2

DOCKET NO. 50-316

This safety evaluation presents NRC staff acceptance of documentation and analyses supporting the amendment of Facility Operating License No. DPR-74 for D. C. Cook Unit 2. This amendment involves deletion of the condition described in paragraph 2.C(3)(s) of DPR-74; the basis for this deletion is staff review and approval of documentation describing the licensees' modification of diesel generator alarm and control circuitry to assure annunciation in the control room of any plant condition which could render the diesel generator inoperable. This safety evaluation discusses our review and approval of the licensees' resolution of this issue.

Modification Made to the Diesel Generator Control Circuitry to Alert the Reactor Operator Should the Diesel Become Incapable of Responding to an Emergency Start Signal

We noted in the Safety Evaluation Report for the Donald C. Cook Nuclear Plant Unit 2 (Supplement No. 7 dated December 1977) that when certain knife switches associated with diesel generator testing were placed in the open position the diesel would be incapable of responding to an emergency start signal. We also noted in this report that with these switches in this position no alarm would be provided to alert the reactor operator of the inoperable condition of the diesel. Further, we concluded based on our review that this design should be modified to provide an alarm in the control room when these knife switches were placed in the open position.

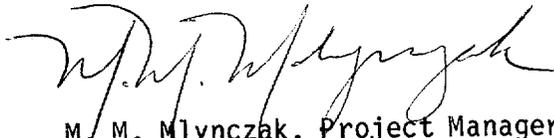
The licensees have subsequently modified this aspect of the design so as to mechanically gang three knife switches together (i.e., if one switch is placed in the open position all three are placed in the open position)

as well as provide an alarm relay. In this design, one of the three knife switches is arranged in the alarm relay circuit such that if any one of these switches is open, an alarm is provided to the control room operator.

Based on our review of this modified design we conclude that this aspect of the design is adequate, conforms to our requirements and is acceptable.

### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment 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 activities will be conducted in compliance with the Commission's regulations and issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.



M. M. Mlynczak, Project Manager  
Light Water Reactors Branch No. 2  
Division of Project Management



Karl Kniel, Chief  
Light Water Reactors Branch No. 2  
Division of Project Management

Dated: March 16, 1978

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-316

INDIANA AND MICHIGAN ELECTRIC COMPANY  
INDIANA AND MICHIGAN POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY

OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 3 to Facility Operating License No. DPR-74, issued to Indiana and Michigan Electric Company and Indiana and Michigan Power Company, which authorizes Mode 1 operation not to exceed 678 megawatts thermal (twenty percent of rated core power level of 3391 megawatts thermal) for the Donald C. Cook Nuclear Plant, Unit No. 2 (the facility) located in Berrien County, Michigan. The amendment is effective as of its date of issuance. This action is a part of the licensing action encompassed in the "Notice of Consideration of Issuance of Facility Operating Licenses and Notice of Opportunity for Hearing Pursuant to 10 CFR Part 50, Appendix D, Section C."

Facility Operating License No. DPR-74 contained condition 2.C(3)(s) concerning modification of the diesel generator alarm and control circuitry which required staff approval prior to Mode 1 operation. This item has been resolved to the satisfaction of the Commission and the appropriate restrictions have been removed in Amendment No. 3. Amendment No. 3 authorizes facility operation in Mode 1 not to exceed 678 megawatts thermal (twenty percent of rated core power level of 3391 megawatts thermal).

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the

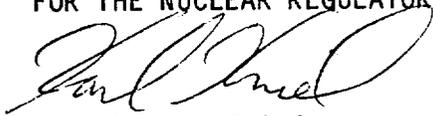
Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment.

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

For further details with respect to this action, see (1) Amendment No. 3 to License No. DPR-74, and (2) the Commission's related Safety Evaluation. These items 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. A copy of items (1) and (2) 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 16th day of March, 1978.

FOR THE NUCLEAR REGULATORY COMMISSION



Karl Kniel, Chief  
Light Water Reactors Branch No. 2  
Division of Project Management

Distribution - AMENDMENT NO. 3 TO DPR-74 (D. C. COOK, UNIT 2), DTD. 3/16/78

Docket File  
NRC PDR  
Local PDR - D. C. Cook Unit 2  
LWR #2 File  
RBlack  
RCDeYoung  
DBVassallo  
JStolz  
KKniel  
OParr  
SAVarga  
MMMylniczak  
JLee  
FJWilliams  
HSmith  
BScott  
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NDube  
WMiller  
HDenton  
VAMoore  
RHVollmer  
MLErnst  
WPGammill  
RJMattson  
JKnight  
DFRoss  
RLTedesco  
BScharf(15)  
DSkovholt  
LCobb  
VStello  
KGoller  
DEisenhut  
WHaass  
JMcGough  
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B. Warnick (IE), Region III  
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bcc: JRBuchanan  
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