Docket No. 50-315

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

Gentlemen:

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-Docket > NRC PDR

DISTRIBUTION

Enclosed is a signed original of an Order for Modification of License issued by the Commission for the Donald C. Cook Nuclear Station Unit No. 1. This Order amends Facility Operating License No. DPR-58 by requiring that the facility be placed and maintained in a cold shutdown condition until all electrical connectors unqualified for post-aceident containment environmental conditions are replaced with connectors or splices meeting the requirements of the Commission's regulations, or until further order of the Commission.

A copy of the Order is being filed with the Office of the Federal Register for publication.

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Sincerely, Original signed, by Don K. Davis, Acting Chief Operating Reactors Branch #2 Division of Operating Reactors

Enclosure: Order for Modification of License

cc w/enclosure: See next page

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the Matter of

INDIANA & MICHIGAN ELECTRIC COMPANY
INDIANA & MICHIGAN POWER COMPANY

(Donald C. Cook Nuclear Plant Unit
No. 1)

Docket No. 50-315

ORDER FOR MODIFICATION OF LICENSE

I.

Indiana & Michigan Electric Company and Indiana & Michigan Power Company (the Licensee) is the holder of Facility Operating License No. DPR-58 which authorizes the operation of a nuclear power reactor known as Donald C. Cook Nuclear Plant Unit No. 1 (the facility) at steady state reactor power levels not in excess of 3250 thermal megawatts (rated power). The facility is a pressurized water reactor (PWR) located at the Licensee's site in Berrien County, Michigan.

II.

As part of an NRC staff review of use of electrical connectors in safety systems of nuclear reactors, the NRC staff met with the Licensee on November 17, 1977. At this meeting the Licensee informed the staff that the facility contains a substantial number of electrical connectors in safety-related equipment and that such connectors have not been tested to determine their qualifications for performing in an accident environment. In the absence of evidence of environmental qualifications of these connectors, these safety systems do not conform to the require-

ments of the Commission's regulations in 10 CFR Part 50 Appendixes A and ${\bf B}$.

· The staff discussed with the Licensee the technical basis upon which operation of the facility could continue safely in the absence of full compliance with the foregoing requirements. The Licensee on November 17, 1977, provided available information concerning operation of systems in which such connectors are thought to be used. However, this information was not sufficient to provide reasonable assurance that all safety systems, required to perform during or subsequent to a loss-of-coolant accident, main steam line break accident, or other high energy line break inside containment could accomplish their safety function when subjected to the environmental conditions produced by the spectrum of such possible accidents. Specifically, (1) the electrical connectors in use at the facility were produced by the same manufacturer and are similar in type to those connectors that failed in the July 1977 Sandia tests, (2) the licensee has not supplied to the Staff any qualification data for any of the environmental parameters of interest and apparently such data are not available, and (3) the licensee has not supplied to the Staff sufficient engineering information to permit the Staff to differentiate between the connectors that failed at Sandia and those that are used at the facility in so far as environmental qualifications are concerned.

Therefore, on the basis of the available information the NRC staff is unable to conclude that the facility can continue to be operated without undue risk to public health and safety.

After discussion with the NRC staff, the Licensee agreed to suspend power operation of the facility until properly qualified connectors or splices were installed in all safety related systems required to perform under accident conditions, or until it was able to otherwise demonstrate that the facility could operate without endangering public health and safety while qualified connectors or splices could be obtained and installed. The staff believes that the Licensee's actions, under the circumstances, are appropriate and should be confirmed by NRC order.

Copies of the following documents are available for public inspection in the Commission's Public Document Room, 1717 H Street, N. W., Washington, DC, 20555 and are being placed in the Commission's Local Public Document Room: (1) Licensee submittal of November 17, 1977 and (2) This Order for Modification of License, In the Matter of Indiana & Michigan Electric Company and Indiana & Michigan Electric Company, Donald C. Cook Nuclear Plant Unit No. 1, Docket No. 50-315.

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Accordingly, pursuant to the Atomic Energy Act of 1954; as amended, and the Commission's Rules and Regulations in 10 CFR Parts 2 and 50, IT IS ORDERED THAT Facility Operating License No. DPR-58 is hereby amended by adding the following new provisions:

The Licensee shall immediately undertake an orderly shutdown, place the facility in a cold shutdown condition, and maintain such condition until:

All unqualified electrical connectors are replaced with electrical connectors or splices meeting the requirements of the Commission's regulations, or until further order of the Commission.

FOR THE NUCLEAR REGULATORY COMMISSION

Edson G. Case, Acting Director Office of Nuclear Reactor Regulation

Dated in Bethesda, Maryland this 18 day of November, 1977