

MAR 15 1976

Docket No. 50-315

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

Gentlemen:

The Commission has issued the enclosed Amendment No. 11 to Facility License No. DPR-58 for the Donald C. Cook Nuclear Plant. This amendment is in response to your request dated September 16, 1975.

This amendment deleted the requirement in the Technical Specifications for plume sampling of zooplankton and phytoplankton.

We have evaluated the potential for environmental impact of plant operation in accordance with the enclosed amendment. The amendment applies to environmental sampling, in the heated discharge plume in the lake, which has been shown to be unproductive. This sampling duplicated information available from more reliable aspects of the Licensee's monitoring activities including assessment of species composition and mortality of plankton from the discharge forebay. We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level, and will not result in any significant environmental impact. Having made this determination, we have further 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.

Since the amendment applies only to nonradiological environmental sampling, it does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. It does not involve a significant increase in the probability or consequences of an accident, does not involve a significant decrease in a safety margin and, therefore, does not involve a significant hazards

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Indiana and Michigan Power Company 2

consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

A copy of the related Federal Register Notice is also enclosed.

Sincerely,

15/

Original signed by
Voss A. Moore

Voss A. Moore, Assistant Director
for Environmental Projects
Division of Site Safety
and Environmental Analysis

Enclosures:

1. Amendment No. 11 to DPR-58
2. Federal Register-Notice

cc: See Attached List

DISTRIBUTION:

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- OR-TIC

Concern only if application date changed to 9/16/75.

<i>Handwritten initials</i>	DSE:EP-1 <i>pc</i>	DSE:EP-1 <i>GWK</i>	OELDT <i>STRIDIRON</i>	LWR02 <i>cab</i>	DSE:EP <i>gsm</i>
SURNAME	PCota:mh	GWKnighton	STRIDIRON	RBenedict	VAMoore
DATE	2/18/76 <i>23</i>	2/23/76	3/5/76	2/27/76 <i>3/12/76</i>	3/11/76

INDIANA AND MICHIGAN ELECTRIC COMPANY

INDIANA AND MICHIGAN POWER COMPANY

DOCKET NO. 50-315

DONALD C. COOK NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 11
License No. DPR-58

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Indiana and Michigan Power Company dated September 16, 1975, 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. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.

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- 2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment.
- 3. This license amendment is effective as of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by

Voss A. Moore

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Voss A. Moore, Assistant Director
for Environmental Projects
Division of Site Safety
and Environmental Analysis

Attachment:
Changes to the
Technical Specifications

Date of Issuance:

OFFICE →	DSE:EP-1	DSE:EP-1 <i>hnm</i>	OELD <i>STRIDIRON</i>	LWR 2-2 <i>RAB</i>	DSE:EP-1 <i>VMoore</i>
SURNAME →	PCota/mh	GKnighton	<i>STRIDIRON</i>	RBenedict	VMoore
DATE →	1/27/76 23 <i>pc</i>	2/3/76	3/8/76	3/12/76	3/15/76

ATTACHMENT TO
AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NO. DPR-58
TO TECHNICAL SPECIFICATIONS
INDIANA AND MICHIGAN ELECTRIC COMPANY
INDIANA AND MICHIGAN POWER COMPANY
DONALD C. COOK NUCLEAR PLANT
DOCKET NO. 50-315

Remove pages: 4.1-27 and 4.1-28 of Appendix B, Environmental
Technical Specifications, to Facility Operating
License No. DPR-58.

Insert revised pages: 4.1-27 and 4.1-28

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Basis

Collection baskets serve as an excellent sampling tool for gathering all fish that enter the intake structures. Little is known about the number of fish that will be impinged at the Cook Plant because of the unique intake design. Therefore, this part of the ecological monitoring program should contribute to the furtherance of knowledge about the species and sex composition as well as the abundance, condition and seasonal occurrence of all fish species impinged by the Plant.

4.1.2.1.3 Study of Plankton, Benthos, and Fish Egg and Larvae Intake Entrainment

Objective

Those plankton, fish eggs and larvae, and benthos organisms drawn into the cooling water system which are small enough to pass through the 3/8 inch mesh on the traveling screens will be drawn through the Plant and exposed to a variety of stresses, including: pressure changes, mechanical abrasion, temperature elevation, and periodic chlorination. This study shall provide short-term data on the abundance and seasonality of this entrainment, and shall determine the effects of condenser passage on the species entrained in relation to its impacts on these species population in the Plant vicinity.

Specifications

Fish Entrainment and Entrainable Benthos

Fish, fish larvae, fish eggs, and benthos shall be sampled at two locations: in the intake forebay and discharge forebay following passage through the condensers. Testing shall be done during 1974, to determine existence or nonexistence of vertical stratification in the intake and discharge forebays; three depths shall be sampled: near the bottom, at mid-depth and near the surface. If vertical stratification is, or is not, observed, sufficient samples to meet statistical reliability shall be taken in each forebay.

Forebay samples shall be taken by pumping measured volumes of water with a 80 gpm diaphragm pump into a 1/2 m plankton net (351 micron mesh). The net should be suspended in a barrel of water in an upright position to prevent damage to organisms from impingement against the net.

During all months of the year except June, July, and August, samples shall be collected twice monthly for each 8 hour segment during a twenty-four hour period. Fish eggs shall be enumerated and attempts at identification made. Fish larvae shall be sorted by species and enumerated, with living-dead distinctions anticipated. Methods for the rapid distinction (under

field conditions) between living and dead larvae are still in developmental stages. The same samples collected for fish eggs and larvae shall be inspected for benthic organisms. During the period through the first year of operation of Unit No. 2, samples of fish eggs and larvae shall be collected weekly for one and/or both Units for each 8 hour segment during a twenty-four hour period, in June, July, and August.

Zooplankton Entrainment

Zooplankton samples shall be collected in the intake forebay and in the discharge forebay following passage through the condenser. Within the intake and discharge forebays, the sample shall be collected by pumping water (with volume of water pumped being recorded) through a #10 plankton net suspended in a barrel of water.

After preliminary experiments to determine whether horizontal or vertical stratification exists and to choose a representative sampling position, statistically reliable (e.g., replicate samples) sampling shall be performed at least monthly. Testing shall be accomplished in 1974 when the Plant is pumping water without having a warm water plume. Simultaneous operation of all seven pumps of both units shall be accommodated at the earliest opportunity for such testing. Care shall be taken in the handling of the samples to preclude damage to organisms. The samples shall be collected during one twenty-four period a month at four times during the day: mid-morning, mid-afternoon, late evening and midnight to determine diurnal variation. Sampling shall be lagged behind sunrise and sunset.

The laboratory techniques described in the preoperational monitoring program report #13* shall be employed for the zooplankton with the exception that statistically representative samples (2 replicate samples from the intake forebay and 2 replicate samples from the discharge forebay) shall, in addition, be counted for live and dead organisms as soon as possible after collection. Further studies shall use incubated samples to determine survivorship of entrained zooplankton over periods up to twenty-four hours after return to ambient water temperatures.

Phytoplankton Entrainment

Phytoplankton samples shall be collected in the intake forebay and in the discharge forebay following passage through the condenser. Sampling frequency shall be at least monthly. Samples shall be collected

*Benton Harbor Power Plant Limnological Studies. Part XIII. Cook Plant Preoperational Studies 1972. 281 p. March 1973.