

November 7, 2002

Mr. A. Christopher Bakken III, Senior Vice President
and Chief Nuclear Officer
Indiana Michigan Power Company
Nuclear Generation Group
500 Circle Drive
Buchanan, MI 49107

SUBJECT: DONALD C. COOK NUCLEAR PLANT, UNIT 1 - SECOND REQUEST FOR
ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT
REQUEST, "POWER UPRATE MEASUREMENT UNCERTAINTY
RECAPTURE" (TAC NO. MB5498)

By application dated June 28, 2002, Indiana Michigan Power Company (the licensee) submitted a license amendment request that would revise the Operating Licenses for the Donald C. Cook Nuclear Plant, Unit 1, and the technical specifications to allow the use of a more accurate flow measurement instrumentation and power calorimetric uncertainty value to allow the licensed core thermal power to be increased by 1.66 percent from 3250 megawatts thermal to 3304 megawatts thermal.

By letter dated October 2, 2002, the U.S. Nuclear Regulatory Commission (NRC) staff issued a request for additional information (RAI) to allow the NRC staff to make an independent assessment of the application. Specifically, question 25 requested the licensee to docket the calculation that establishes the thermal power measurement uncertainty. By letter dated October 17, 2002, the licensee docketed the calculations. The NRC staff has reviewed the calculation and found issues that were not adequately addressed. To enable the staff to complete the review of the proposed amendment, the licensee needs to provide additional information. Enclosed is the NRC staff's RAI.

The RAI was discussed with Mr. Brian McIntyre, et al., of your staff on October 31, 2002, during a telephone conference call. The enclosed RAI is similar in content to the RAI discussed with your staff during the conference call. A mutually agreeable target date of November 12, 2002, for your response was established.

If there is need to revise that target date, please contact me at (301) 415-1345.

Sincerely,

/RA/

John F. Stang, Senior Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-315

Enclosure: Request for Additional Information

cc w/encl: See next page

November 7, 2002

Mr. A. Christopher Bakken III, Senior Vice President
and Chief Nuclear Officer
Indiana Michigan Power Company
Nuclear Generation Group
500 Circle Drive
Buchanan, MI 49107

SUBJECT: DONALD C. COOK NUCLEAR PLANT, UNIT 1 - SECOND REQUEST FOR
ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT
REQUEST, "POWER UPRATE MEASUREMENT UNCERTAINTY
RECAPTURE" (TAC NO. MB5498)

By application dated June 28, 2002, Indiana Michigan Power Company (the licensee) submitted a license amendment request that would revise the Operating Licenses for the Donald C. Cook Nuclear Plant, Unit 1, and the technical specifications to allow the use of a more accurate flow measurement instrumentation and power calorimetric uncertainty value to allow the licensed core thermal power to be increased by 1.66 percent from 3250 megawatts thermal to 3304 megawatts thermal.

By letter dated October 2, 2002, the U.S. Nuclear Regulatory Commission (NRC) staff issued a request for additional information (RAI) to allow the NRC staff to make an independent assessment of the application. Specifically, question 25 requested the licensee to docket the calculation that establishes the thermal power measurement uncertainty. By letter dated October 17, 2002, the licensee docketed the calculations. The NRC staff has reviewed the calculation and found issues that were not adequately addressed. To enable the staff to complete the review of the proposed amendment, the licensee needs to provide additional information. Enclosed is the NRC staff's RAI.

The RAI was discussed with Mr. Brian McIntyre, et al., of your staff on October 31, 2002, during a telephone conference call. The enclosed RAI is similar in content to the RAI discussed with your staff during the conference call. A mutually agreeable target date of November 12, 2002, for your response was established.

If there is need to revise that target date, please contact me at (301) 415-1345.

Sincerely,

/RA/

John F. Stang, Senior Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-315

Enclosure: Request for Additional Information

cc w/encl: See next page

DISTRIBUTION:

PUBLIC	EMarinos	PRebstock	MShuaibi
PDIII-1 Reading	OGC	LRaghavan	ACRS
JStang	AVegel, RIII	THarris	

ADAMS Accession No. ML

OFFICE	PDIII-1/PM	PDIII-1/LA	PDIII-1/SC
NAME	JStang	THarris	LRaghavan
DATE	11/07/02	11/07/02	11/07/02

OFFICIAL RECORD COPY

Donald C. Cook Nuclear Plant, Units 1 and 2

cc:

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

Attorney General
Department of Attorney General
525 West Ottawa Street
Lansing, MI 48913

Township Supervisor
Lake Township Hall
P.O. Box 818
Bridgman, MI 49106

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
7700 Red Arrow Highway
Stevensville, MI 49127

David W. Jenkins, Esquire
Indiana Michigan Power Company
One Cook Place
Bridgman, MI 49106

Mayor, City of Bridgman
P.O. Box 366
Bridgman, MI 49106

Special Assistant to the Governor
Room 1 - State Capitol
Lansing, MI 48909

Drinking Water and Radiological
Project Division
Michigan Department of
Environmental Quality
3423 N. Martin Luther King Jr. Blvd.
P. O. Box 30630, CPH Mailroom
Lansing, MI 48909-8130

Scot A. Greenlee
Director, Nuclear Technical Services
Indiana Michigan Power Company
Nuclear Generation Group
500 Circle Drive
Buchanan, MI 49107

David A. Lochbaum
Union of Concerned Scientists
1616 P Street NW, Suite 310
Washington, DC 20036-1495

Michael J. Finissi
Plant Manager
Indiana Michigan Power Company
Nuclear Generation Group
One Cook Place
Bridgman, MI 49106

Joseph E. Pollock
Site Vice President
Indiana Michigan Power Company
Nuclear Generation Group
One Cook Place
Bridgman, MI 49106

REQUEST FOR ADDITIONAL INFORMATION

SUBMITTAL AEP: NRC 2900-03 MEASUREMENT UNCERTAINTY RECAPTURE

DATED OCTOBER 17, 2002

INDIANA MICHIGAN POWER COMPANY

DONALD C. COOK, UNIT 1

DOCKET NO. 50-315

The following two questions are generated from the NRC staff review of the measurement uncertainty calculation.

1. The issue of common (ie non-independent) influences must be addressed. Some examples of common influences are listed below:
 - a. common instrument environments,
 - b. common Measurement and Testing Equipment related uncertainty, and
 - c. common source for feed water flow and temperature data (ref. the Caldon caveat in calculation Attachment 8 against using square root sum of the squares for flow and temperature).

2. Figure 4.2 and Table 4.2 show the use of several parameters and calculations that influence the core thermal power calculation, but for which no uncertainty allowance is provided. Please justify that there is no uncertainty associated with these parameters and calculations, or account for the associated uncertainties. Note that there are two issues for each parameter or calculation: 1) establishing what uncertainty value is appropriate, and 2) accounting for the effect of each uncertainty upon the overall uncertainty in the core thermal power evaluation. The parameters in question are:
 - a. net heat loss,
 - b. steam quality (both the value for main steam and the value for the blowdown flow from each steam generator, and
 - c. steam table data (both the uncertainties involved in the Plant Process Computer calculations that generate the steam table values and the uncertainties inherent in the steam tables themselves).

ENCLOSURE