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 2 - REQUEST FOR ADDITIONAL

INFORMATION REGARDING LICENSE AMENDMENT REQUEST, "REACTOR

COOLANT SYSTEM PRESSURE - TEMPERATURE CURVES," DATED

JULY 23, 2002, (TAC NO. MB5699)

By application dated July 23, 2002, Indiana Michigan Power Company submitted a license amendment request that would propose to revise the Unit 2 reactor coolant system pressure-temperature curves in Technical Specifications (TS) Figures 3.4-2 and 3.4-3 and associated TS Bases. The revised curves will bound operation of the unit for the remainder of its current license duration for Unit 2.

The Nuclear Regulatory Commission (NRC) staff has reviewed your request and concluded that it does not provide technical information in sufficient detail to enable the staff to make an independent assessment regarding the acceptability of the proposal in terms of regulatory requirements and the protection of public health and safety. Enclosed is the request for additional information (RAI).

In accordance with the guidance contained in Nuclear Reactor Regulation Office Instruction 101 Revision 1, the draft RAI was e-mailed to your staff and a conference call held September 16, 2002, with Mr. Gordon Arent, et. al., of your staff to discuss the RAI. The questions in the enclosure to this letter are the same as the draft questions. A mutually agreeable target date of October 21, 2002, for your response was established. The NRC staff will continue review of your application when your response to the enclosed question is received. If circumstances result in the 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. 50-316

Enclosure: Request for Additional Information

cc w/encl: See next page

DONALD C. COOK (D. C. COOK) UNIT 2 REVIEW FOR SUBMITTAL AEP: NUCLEAR REGULATORY COMMISSION 2349-01 REACTOR COOLANT SYSTEM PRESSURE - TEMPERATURE CURVES DATED JULY 23, 2002

By letter dated July 23, 2002, the Indiana Michigan Power Company, licensee for the D. C. Cook Nuclear Power Plant, Unit 2, submitted information and requested approval for Technical Specification changes to revise the pressure vessel pressure temperature curves. The submittal included WCAP-13515 Rev. 1, the surveillance capsule report for capsule U. In the context of WCAP-13515, Rev. 1, please provide the information requested in the following questions.

- What is the physical basis for the calculated peak inside surface E > 1.0 MeV at 32 effective full power years to be lower than the original FERRET Code adjusted value? This plant has a thermal shield and the transport cross sections were changed to ENDF/B-VI which should have increased the original value.
- 2. Is the old and the new FERRET Code the same? (We noted that the calculated value was used and not the FERRET Code adjusted value).
- 3. The former plates have been added to the revised analysis. Were any of the dosimeters in the shadow of the former plates? Is the peak location in the shadow of the former plates?
- 4. The γ-fission, U-235 impurity, and Pu-239 built-in corrections (Page 6-8) seem to be new in the revision. How were these corrections derived?
- 5. It is stated that a 10 percent positive bias was applied to the neutron sources for Cycles 13 and on. Was there also an assumption of low leakage loadings made for the same cycles?

September 27, 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

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Donald C. Cook Nuclear Plant, Units 1 and 2

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