July 17, 2003

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, "LICENSE AMENDMENT REQUEST TO REVISE LOW PRESSURIZER PRESSURE SAFETY INJECTION SETPOINT," (TAC NO. MB8202)

Dear Mr. Bakken:

On March 27, 2003, the Indiana Michigan Power Company (I&M) proposed to amend Appendix A, Technical Specifications (TS), of Facility Operating License DRP-74 for Donald C. Cook Nuclear Plant, Unit 2. The proposed amendment includes changes to TS Table 3.3-4, Item 1.d, and the P-11 setpoint in the Engineered Safety Features Interlock Table. Specifically, the proposed amendment would (1) revise the low pressurizer pressure safety injection (SI) trip setpoint from its current value of greater than or equal to 1900 pounds per square inch (psig), to greater than or equal to 1815 psig; (2) revise the low pressurizer pressure SI allowable value from greater than or equal to 1890 psig, to greater than or equal to 1805 psig; (3) revise the P-11 setpoint from its current value of greater than or equal to 2010 psig, to greater than or equal to 1915 psig; and (4) make format changes to the affected TS pages that improve appearance but do not affect any requirements.

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the March 27, 2003, application and determined that the additional information identified in the enclosure is needed for the NRC staff to complete its review. The items in the enclosure were discussed with Mr. Joseph Waters of your staff and a mutually agreeable target date of August 8, 2003, for your response was established. If circumstances result in the need to revise the target date, please contact me at (301) 415-2859 at the earliest opportunity.

Sincerely,

## /RA/

Mohammed Shuaibi, Senior Project Manager, Section 1 Project Directorate III Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-316

Enclosures: As stated

cc w/encls: See next page

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ADAMS ACCESSION NUMBER: ML031960668 \*By email

OFFICE	PM:PD3-1	LA:PD3-1*	SC:SRXB	SC:PD3-1
NAME	MShuaibi	THarris	LLois for JUhle	LRaghavan
DATE	07/16/03	07/16 /03	07/17/03	07/17/03

**OFFICIAL RECORD COPY** 

Donald C. Cook Nuclear Plant, Units 1 and 2

CC:

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## DONALD C. COOK NUCLEAR PLANT, UNIT 2 REQUEST FOR ADDITIONAL INFORMATION CHANGES TO LOW PRESSURIZER PRESSURE SAFETY INJECTION SETPOINT

- 1. The licensee states, "Approval of these changes will alleviate an operator concern that a safety injection (SI) actuation is imminent following a reactor trip." The staff understands this is proposed to reduce the number of SI signals that result from transients that do not require SI and to reduce necessary operator actions. Please justify how the change in the setpoint will allow the plant to successfully mitigate transients that require SI.
- 2. By changing the low pressurizer pressure SI trip setpoint, a time delay is introduced from the time the reactor trips to the time SI is actuated. Are there any effects on the plant due to this time delay? Will there be changes to the emergency operating procedures with respect to the new SI setpoint? What kind of training will operators receive to these procedural changes?
- 3. Describe the methodology used to determine the new SI setpoint and the analysis which demonstrates the new setpoint is still bounded by the uncertainty margin.
- 4. The licensee states there was a design change that provides a 3.5 second delay to the auxiliary feedwater flow retention circuit which exacerbates the operator's concern about reactor coolant system cooling. What is the purpose of the 3.5 second delay? What would be the consequence of eliminating the 3.5 second delay?
- 5. Which licensing basis transient and accident analyses have been reevaluated to confirm lowering the SI setpoint is acceptable? Are there any effects on departure from nucleate boiling or fuel design limits due to this change?
- 6. In your application you indicated that a loss-of-coolant accident (LOCA), a feedwater line break, and an inadvertent depressurization of the main steam system are affected by the low pressurizer pressure SI setpoint. Please confirm that no other transients are affected by the low pressurizer pressure SI setpoint. Describe in detail all transients, including but not limited to LOCA, feedwater line break, and inadvertent depressurization of the main steam system, that are affected by this modification and demonstrate that the new SI setpoint doesn't hamper the system's ability to successfully mitigate them.