April 20, 2007

Mr. Mano K. Nazar
Senior Vice President and
Chief Nuclear Officer
Indiana Michigan Power Company
Nuclear Generation Group
One Cook Place
Bridgman, MI 49106

SUBJECT: D. C. COOK NUCLEAR PLANT, UNIT 2 (DCCNP-2) - REQUEST FOR ADDITIONAL INFORMATION REGARDING PROPOSED AMENDMENT INVOLVING TURBINE CONTROL SYSTEM FLUID OIL PRESSURE (TAC NO. MD3161)

Dear Mr. Nazar:

In a letter dated September 15, 2006, Indiana Michigan Power Company (I&M) requested an amendment to the Technical Specifications (TS) of DCCNP-2 to reflect a plant modification that will replace the current turbine control system, leading to a change of the nominal control fluid oil operating pressure from 114 psig to 1600 psig. I&M proposed to revise the allowable low fluid oil pressure value in the TS from greater than or equal to 57 psig to greater than or equal to 750 psig. The Nuclear Regulatory Commission (NRC) staff determined that additional information is needed to complete its review. Accordingly, by e-mail dated January 3, 2007 (Accession No. ML070040188), the NRC staff provided draft questions to I&M personnel.

On January 11, 2007, the NRC staff discussed the draft questions with I&M personnel by telephone, and agreed to revise the questions where appropriate. The enclosed Request for Additional Information (RAI) conveys the revised questions. Please respond by June 30, 2007. Feel free to contact me if you need clarification of this RAI.

Sincerely,

/RA/

Peter S. Tam, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-316

Enclosure:
Request for Additional Information

cc w/encl: See next page

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OFFICE	LPL3-1\PM	LPL3-1/LA	BOPB/BC	LPL3-1/BC
NAME	PTam	THarris	JSegala	LRaghavan
DATE	4/19/07	4/19/07	4/12/07	4/20/07

*Questions transmitted by memo of 4/12/07.

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REQUEST FOR ADDITIONAL INFORMATION

D.C. COOK NUCLEAR PLANT, UNIT 2 (DCCNP-2)

AMENDMENT REGARDING TURBINE CONTROL SYSTEM FLUID OIL PRESSURE

(1) As indicated in the licensee's submittal, the replacement of the turbine control system will increase the normal control oil fluid operating pressure from 114 psig to 1600 psig and will revise the allowable low fluid oil pressure value for turbine trip from greater than or equal to 57 psig to greater than or equal to 750 psig. Please provide the following information:

(i) Discuss to what extent this change involves any associated piping design changes that are necessary to accommodate the increased pressure;

(ii) Discuss whether or not pipe failures associated with this change need to be considered due to the large increase in turbine oil operating pressure; and if so

(iii) Discuss to what extent any safety-related equipment needs to be protected from the effects of these postulated pipe failures.

(2) There is insufficient information in the application regarding the replacement of the existing mechanical-hydraulic control system for the main turbine and the east and west main feed-pump turbines with a Triconex TS3000 triple modular redundant control system. Please describe:

(i) The system design and how it operates, and how oil pressure varies with time during normal plant operation and following a turbine trip; and

(ii) The basis for how the 750 psig trip set point was established to assure that spurious trips will not occur and safety functions will not be challenged, including uncertainty considerations.

Donald C. Cook Nuclear Plant, Units 1 and 2

cc:

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