

May 29, 2005

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

SUBJECT: SAFETY EVALUATION REPORT RELATED TO THE LICENSE RENEWAL OF
THE DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2

Dear Mr. Nazar:

By letter dated October 31, 2003, Indiana Michigan Power Company (I&M) submitted, for the U.S. Nuclear Regulatory Commission's (NRC's) review, an application pursuant to 10 CFR Part 54, to renew the operating license for the Donald C. Cook Nuclear Plant, Units 1 and 2, for an additional 20 years. The NRC determined that the License Renewal Application (LRA) was complete and acceptable for docketing on December 10, 2003. Since that time, the NRC staff has reviewed the Donald C. Cook Nuclear Plant, Units 1 and 2 LRA, issued requests for additional information (RAIs), reviewed the applicant's responses to the staff's RAIs, developed a safety evaluation report (SER) with Open Items dated December 21, 2004, and reviewed the applicant's responses to the Open Items, as documented in a letter to the NRC dated March 2, 2005. On the basis of this review, the staff has developed the enclosed SER to document its findings associated with the safety review of the LRA and supporting documentation for the Donald C. Cook Nuclear Plant, Units 1 and 2.

If you have any questions regarding this matter, please contact the Project Manager, Mr. Jonathan G. Rowley, at 301-415-4053 or e-mail JGR@nrc.gov.

Sincerely,

/RA/ (S. Lee for)

Pao-Tsin Kuo, Program Director
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket Nos.: 50-315 and 50-316

Enclosure: As stated

cc w/encl: See next page

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2. Safety Evaluation Report Related to the License Renewal of the Donald C. Cook Nuclear Plant, Units 1 and 2: ML051510092

3. **Pkg: ML051510015**

**via e-mail

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