

**Indiana Michigan
Power Company**
500 Circle Drive
Buchanan, MI 49107 1373



March 3, 2003

AEP:NRC:3054-03
10 CFR 2.202

Docket Nos: 50-315
50-316

Secretary, Office of the Secretary of the Commission
U.S. Nuclear Regulatory Commission
ATTN: Rulemakings and Adjudications Staff
Washington, DC 20555

Donald C. Cook Nuclear Plant Units 1 and 2
**ANSWER TO NUCLEAR REGULATORY COMMISSION ORDER
ESTABLISHING INTERIM INSPECTION REQUIREMENTS FOR
REACTOR PRESSURE VESSEL HEADS AT
PRESSURIZED WATER REACTORS**

- References:
1. U. S. Nuclear Regulatory Commission Order EA-03-009, "Issuance of Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors," dated February 11, 2003
 2. Letter from S. A. Greenlee, Indiana Michigan Power Company, to U. S. Nuclear Regulatory Commission Document Control Desk, "Proposed Alternatives to the Requirements of Section XI of the American Society of Mechanical Engineers Code – Request for Additional Information (TAC Nos. MB3551 and MB3552)," AEP:NRC:2055, dated April 25, 2002

This letter transmits Indiana Michigan Power Company's (I&M's) answer to a Nuclear Regulatory Commission (NRC) order establishing interim inspection requirements for reactor pressure vessel heads at pressurized water reactors.

The NRC order (Reference 1) imposes enhanced requirements for inspection of pressurized water reactor pressure vessel heads and related penetration nozzles. Section V of the order requires that, within twenty days of its date of issuance, licensees submit an answer to the order, either consenting to the order or setting

forth reasons as to why the order should not have been issued. Section IV of the order prescribes the enhanced inspection requirements. Section IV.F of the order requires that licensees notify the NRC, in the response required by Section V, if (1) they are unable to comply with any of the requirements of Section IV, or (2) compliance with any of the requirements of Section IV is unnecessary. Section IV.F further states that licensees proposing to deviate from the enhanced inspection requirements may request that the Director, Office of Nuclear Reactor Regulation relax conditions of the order.

Consent to Order and Anticipated Relaxation Requests

Pursuant to Section V of Reference 1, I&M, the licensee for Donald C. Cook Nuclear Plant (CNP) Unit 1 and Unit 2, hereby consents to the order. However, I&M is unable to comply and/or considers compliance with the requirements identified below to be unnecessary for the reasons stated.

- Sections IV.C(1)(b)(i), IV.C(2)(b)(i), and IV.C(3)(b)(i) of the order require that ultrasonic testing of each reactor pressure vessel head penetration nozzle extend to the bottom of the nozzle. The probes used for such examinations have separate transducers for sending and receiving the ultrasonic signal. In the probes used for detection of the most significant type of cracks, circumferential cracks, the two transducers are arranged vertically, approximately 24 millimeters apart. Therefore, the lower transducer will not be in contact with the nozzle inside wall unless the upper transducer is inserted greater than approximately 24 millimeters into the nozzle. As a result, the probe cannot scan a small portion of the lower end of the nozzle. I&M does not consider it necessary to redesign the circumferential probe, or use a second probe, to scan that small portion of the lower end of the nozzle, since it is not a pressure boundary. Additionally, ultrasonic testing of the nozzle greater than 2 inches below the J-groove weld is not necessary, since that portion of the nozzle is also not a pressure boundary.
- Sections IV.C(1)(b)(ii), IV.C(2)(b)(ii), and IV.C(3)(b)(ii) of the order require eddy current or dye penetrant testing of the wetted surface of each reactor pressure vessel head penetration nozzle base material. However, the outside surface of each nozzle is threaded at the lower end, and some nozzles have a guide funnel screwed onto these threads. Eddy current or dye penetrant testing of the threaded surfaces or the surfaces inside the guide funnel is not possible. Additionally, eddy current or dye penetrant testing of nozzle surfaces greater than 2 inches below the J-groove weld is not necessary, since that portion of the nozzle is not a pressure boundary.

I&M intends to request relaxation of the above identified requirements, in accordance with Section IV.F of the order, by separate correspondence.

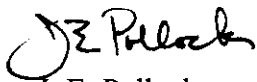
Clarifications from Public Meeting

Based on the clarifications provided at the February 24, 2003, public meeting regarding the order, I&M understands that:

- The requirements in Sections IV.C(1)(a), IV.C(2)(a), and IV.C(3)(a) of the order, for 100 percent bare metal visual inspection, apply only to areas of the upper surface of the reactor pressure vessel head related to cracking of penetrations, including 360 degrees around the nozzle penetrations, and areas of the reactor pressure vessel head that may be subject to specific external sources of boric acid. Areas such as head flange stud holes and lifting lug holes would not be included in the inspection unless there was evidence that they had been exposed to boric acid.
- Footnote 1 on Page 7 of the order does not require that flaw evaluation be performed in accordance with the letter dated November 21, 2001, from J. Strosnider, NRC, to A. Marion, Nuclear Energy Institute. Therefore, I&M intends to use the flaw evaluation guidance used in previous penetration nozzle inspections at CNP. That flaw evaluation guidance is contained in Westinghouse document WCAP-14118, Revision 5, "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operation: D. C. Cook Units 1 and 2," dated January 2002, which was transmitted to the NRC by Reference 2.

There are no new commitments identified in this letter. Should you have any questions, please contact Mr. Brian A. McIntyre, Manager of Regulatory Affairs, at (269) 697-5806.

Sincerely,



J. E. Pollock
Site Vice President

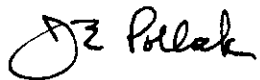
JRW/rdw

- c: Document Control Desk, NRC
Director, Office of Nuclear Reactor Regulation, NRC
Assistant General Counsel for Materials Litigation and Enforcement, NRC
K. D. Curry, Ft. Wayne AEP
J. E. Dyer, NRC Region III
J. T. King, MPSC
MDEQ - DW & RPD
NRC Resident Inspector
J. F. Stang, Jr., NRC Washington, DC

AFFIRMATION

I, Joseph E. Pollock, being duly sworn, state that I am Vice President of Indiana Michigan Power Company (I&M), that I am authorized to sign and file this request with the Nuclear Regulatory Commission on behalf of I&M, and that the statements made and the matters set forth herein pertaining to I&M are true and correct to the best of my knowledge, information, and belief.

Indiana Michigan Power Company



J. E. Pollock
Site Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 3rd DAY OF March, 2003

Margaret M. Swartz
Notary Public

My Commission Expires 11/23/2005

bc: A. C. Bakken III
M. J. Finissi
S. A. Greenlee
D. J. Garner
G. F. Borlolan/C. R. Lane/R. E. Hall
T. R. Satyan-Sharma
D. W. Jenkins
J. A. Kobyra
B. A. McIntyre
J. E. Newmiller
J. E. Pollock
D. J. Poupard
M. K. Scarpello
T. K. Woods