

January 14, 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

SUBJECT: DONALD C. COOK (D. C. COOK) NUCLEAR PLANT, UNITS 1 AND 2 -  
RESPONSE TO NUCLEAR REGULATORY COMMISSION (NRC) BULLETIN  
2001-01, "CIRCUMFERENTIAL CRACKING OF REACTOR PRESSURE VESSEL  
HEAD PENETRATION NOZZLES" (TAC NOS. MB2624 AND MB2425)

Dear Mr. Bakken:

On August 3, 2001, the staff issued Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," to the industry requesting that addressees provide information related to the structural integrity of the reactor pressure vessel head penetration (VHP) nozzles for their respective facilities, including the extent of VHP nozzle leakage and cracking that has been found to date, the inspections and repairs that have been undertaken to satisfy applicable regulatory requirements, and the basis for concluding that their plans for future inspections will ensure compliance with applicable regulatory requirements at their respective pressurized-water reactor designed plants. In addition, the bulletin requested that licensees not planning to perform inspections prior to December 31, 2001, provide the technical basis for their planned inspection schedules.

You provided your response to the information requested in the bulletin by letter dated September 4, 2001. You determined that, since a crack was discovered and repaired in Unit 2 in the 1994-96 time period, Unit 2 will be in the NRC category of, "Previously experienced either leakage from or cracking in VHP nozzles." Your response stated, in part, that, "D. C. Cook Unit 2 intends to perform a remote visual examination of all accessible VHPs under the reactor vessel head insulation during the next 2001 Unit 2 refueling outage," which was scheduled for November 2001. Due to a forced outage in September 2001, you subsequently shifted your Unit 2 planned refueling outage date to begin on January 19, 2002. By letter dated October 12, 2001, you submitted a revised response to the bulletin to eliminate reference to the year 2001 for the next Unit 2 refueling outage.

By letters dated November 5, 2001, November 28, 2001, November 30, 2001, and December 5, 2001, you provided additional information on the justification for continued operation of D. C. Cook Unit 2, until January 19, 2002, and the scope of the inspection to take place during the refueling outage. In addition, a public meeting was held on November 20, 2001, to discuss the issue.

Based on the information provided in your responses and the information available to the staff regarding the industry experience with VHP nozzle cracking, the staff finds that you have provided sufficient information to justify operation until January 19, 2002, at which time you will

shut down the Donald C. Cook Nuclear Plant Unit 2, facility for the next refueling outage and perform VHP nozzle inspections as discussed in your letter dated December 6, 2001. In accordance with the bulletin, please provide the following information for both units 30 days after restart following the next refueling outage:

- a. a description of the extent of VHP nozzle leakage and cracking detected, including the number, location, size, and nature of each crack detected;
- b. if cracking is identified, a description of the inspections (type, scope, qualification requirements, and acceptance criteria), repairs, and other corrective actions you have taken to satisfy applicable regulatory requirements. This information is requested only if there are any changes from prior information submitted in accordance with this bulletin.

The staff finds that you have provided the requested information and that, based on this information, there is reasonable assurance that the public health and safety will be maintained. This completes the staff review of the issues associated with Bulletin 2001-01.

Sincerely,

*/RA/*

John F. Stang, Senior Project Manager, Section 1  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

cc: See next page

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- a. a description of the extent of VHP nozzle leakage and cracking detected, including the number, location, size, and nature of each crack detected;
- b. if cracking is identified, a description of the inspections (type, scope, qualification requirements, and acceptance criteria), repairs, and other corrective actions you have taken to satisfy applicable regulatory requirements. This information is requested only if there are any changes from prior information submitted in accordance with this bulletin.

The staff finds that you have provided the requested information and that, based on this information, there is reasonable assurance that the public health and safety will be maintained. This completes the staff review of the issues associated with Bulletin 2001-01.

Sincerely,

*/RA/*

John F. Stang, Senior Project Manager, Section 1  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

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<b>DATE</b>	<b>01/03/2002</b>	<b>01/03/2002</b>	<b>01/08/2002</b>	<b>01/03/2002</b>	<b>01/14/2002</b>

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