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June 12, 2003

AEP:NRC:3054-09  
10 CFR 2.202

Docket No: 50-316

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Stop O-P1-17  
Washington, DC 20555-0001

**Donald C. Cook Nuclear Plant Unit 2  
SUPPLEMENT TO REQUEST FOR RELAXATION OF REACTOR  
PRESSURE VESSEL HEAD PENETRATION INSPECTION  
REQUIREMENTS IN NUCLEAR REGULATORY COMMISSION ORDER**

- References: 1) U. S. Nuclear Regulatory Commission (NRC) 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 J. E. Pollock, Indiana Michigan Power Company (I&M), to U. S. NRC Document Control Desk, "Donald C. Cook Nuclear Plant Unit 1 and Unit 2, Request for Relaxation from Nuclear Regulatory Commission Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors," AEP:NRC:3054-04, dated March 26, 2003
- 3) Letter from J. E. Pollock, I&M, to U. S. NRC Document Control Desk, "Revised Response to Request for Additional Information Regarding Relaxation of Reactor Pressure Vessel Head Penetration Inspection Requirements in Nuclear Regulatory Commission Order," AEP:NRC:3054-08, dated June 2, 2003

A101

- 4) Electric Power Research Institute Document MRP-55, "Materials Reliability Program (MRP) Crack Growth Rates for Evaluating Primary Water Stress Corrosion Cracking (PWSCC) of Thick-Wall Alloy 600 Materials," Revision 1, dated November 2002

This letter supplements a request for relaxation of two reactor vessel head penetration inspection requirements contained in an NRC order.

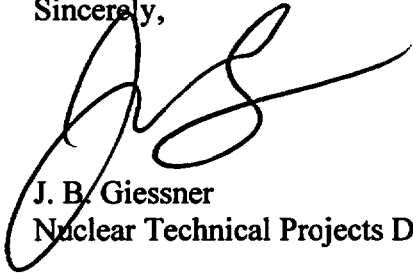
NRC Order EA-03-009 (Reference 1) established interim inspection requirements for reactor pressure vessel head penetrations at pressurized water reactors. In Reference 2, I&M requested relaxation from two requirements in the order. Reference 3 provided a revised response to an NRC request for additional information regarding the proposed relaxations. The information provided in Reference 3 included the results of crack growth calculations for Unit 2 based on Electric Power Research Institute document MRP-55 (Reference 4). In a telephone discussion conducted June 12, 2003, the NRC requested that I&M document acceptance of a condition pertaining to MRP-55 that would be stipulated as part of NRC approval of the proposed relaxations. The NRC has imposed this condition in approving similar relaxations for other nuclear power plants.

In support of the proposed relaxations, I&M concurs with the following condition.

If the NRC staff finds that the crack growth formula in industry report MRP-55 is unacceptable, the licensee shall revise its analysis that justifies relaxation of the Order within 30 days after the NRC informs the licensee of an NRC-approved crack growth formula. If the licensee's revised analysis shows that the crack growth acceptance criteria are exceeded prior to the end of the current operating cycle, this relaxation is rescinded and the licensee shall, within 72 hours, submit to the NRC written justification for continued operation. If the revised analysis shows that the crack growth acceptance criteria are exceeded during the subsequent operating cycle, the licensee shall, within 30 days, submit the revised analysis for NRC review. If the revised analysis shows that the crack growth acceptance criteria are not exceeded during either the current operating cycle or the subsequent operating cycle, the licensee shall, within 30 days, submit a letter to the NRC confirming that its analysis has been revised. Any future crack growth analyses performed for this and future cycles for RPV head penetrations must be based on an acceptable crack growth rate formula.

This letter contains no new regulatory commitments. Should you have any questions, please contact Mr. Brian A. McIntyre, Manager of Regulatory Affairs, at (269) 697-5806.

Sincerely,



J. B. Giessner  
Nuclear Technical Projects Director

JW/rdw

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