

Indiana Michigan
Power Company
500 Circle Drive
Buchanan, MI 49107 1395

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January 27, 1997

AEP:NRC:1238H
10 CFR 2.201

Docket Nos.: 50-315
50-316

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

Donald C. Cook Nuclear Plant Units 1 and 2
NRC INSPECTION REPORT NOS. 50-315/96012 (DRP)
AND 50-316/96012 (DRP) REPLY TO NOTICE OF VIOLATION

This letter is in response to a letter from Geoffrey E. Grant dated December 27, 1996, that forwarded a notice of violation to Indiana Michigan Power Company. The violation of NRC requirements was identified during the motor operated valve closeout inspection conducted by Messrs. A. Dunlop, A. Guzzman, and R. Cain from October 21 through 25, and December 5, 1996. The violation is associated with untimely performance of a prompt operability evaluation upon receipt of an updated valve factor number.

Our reply to the violations is provided in the attachment to this letter.

Sincerely,

E. E. Fitzpatrick
Vice President

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 27th DAY OF JANUARY, 1997

Jan Watson
Notary Public

My Commission Expires: _____

jmb

Attachment

cc: A. A. Blind
A. B. Beach
MDEQ - DW & RPD
NRC Resident Inspector
J. R. Padgett

JAN WATSON
NOTARY PUBLIC, BERRIEN COUNTY, MI
MY COMMISSION EXPIRES FEB. 10, 1999

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JAN 30 1997

ATTACHMENT TO AEP:NRC:1238H

REPLY TO NOTICE OF VIOLATION:
NRC INSPECTION REPORT NOS. 50-315/96012 (DRP)
AND 50-316/96012 (DRP)



"During an NRC inspection conducted from October 21-25, 1996, one violation of NRC requirements was identified. In accordance with the 'General Statement of Policy and Procedure for NRC Enforcement Actions,' NUREG-1600, the violation is listed below." Our response follows.

NRC Violation

"D. C. Cook Nuclear Plant technical specification (T/S) 6.8.1 states, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in appendix A of regulatory guide (RG) 1.33, Revision 2, February 1978.

RG 1.33, appendix A, paragraph 1.b, requires that a procedure be written delineating the authorities and responsibilities for safe operation and shutdown.

Plant Manager Instruction (PMI) 7030, 'Corrective Action,' was written in accordance with RG 1.33. Step 6.9.a requires an originator to initiate a condition report for known or suspected adverse conditions/events. Step 5.31 requires, in part, that a prompt operability determination '...must be made expeditiously following identification of a potentially degraded condition that has the potential to impact SSC operability.'

Contrary to the above, as of October 21, 1996, the licensee failed to initiate a condition report and properly perform and document a prompt operability determination for the Unit 1 power operated relief valve block valve when valve factor information was obtained that had a potential adverse effect on the operability of the valves to perform the required design-basis function.

This is a Severity Level IV violation (Supplement I). (50-315/960 12-01 (DRS); 50-316/960 12-01 (DRS))."

Response to NRC Violation

1. Admission or Denial of the Alleged Violation

Indiana Michigan Power Company admits to the violation as cited in the NRC notice of violation.

2. Reason for the Violation

An operability determination for motor operated valve (MOV) 1-NMO-152, power operated relief block valve, using a 0.4 valve factor was documented in condition report (CR) 96-0594 in April 1996. During a previous MOV GL 89-10 NRC inspection, the use of the vendor supplied valve factor of 0.309 was questioned. The NRC requested that the use of the 0.309 valve factor be re-reviewed. The review found differential pressure testing of a similar valve by EPRI yielded valve factors of 0.267 to 0.296. Contact with EPRI found the test data was valid but may not be as conservative as the EPRI performance predictive model (PPM) algorithm. The EPRI PPM coordinator indicated a valve factor of 0.4 was more appropriate. The valve factor of 0.4 was applied as the design basis to the MOV thrust calculation and the results compared to the current thrust settings.



During the continuing review of best available design basis information for the closure of GL 89-10, it was determined the application of the EPRI PPM would be appropriate because only the EPRI differential pressure testing of a "similar" valve was used as "best available data". These valves cannot be tested under differential pressure conditions at Cook Nuclear Plant and the only available differential pressure test data that could be found in the industry was the EPRI testing. During the week of October 6, 1996, while working on the GL 89-10 closure document, we were verbally notified by the contractor performing the EPRI PPM algorithm that a valve factor of 0.51 for the power operated relief block valve was predicted. At this time, the design validation review of the calculation was still in progress. The review was completed on October 11, 1996.

During subsequent discussions within engineering, it was determined that because the EPRI PPM algorithm was performed with information applicable to the new design to be installed under design change package 007, the new EPRI predicted valve factor 0.51 would be only applied after the design change was implemented. The 0.4 valve factor from EPRI differential pressure testing of a "similar" valve would remain as the design basis valve factor until design change package 007 was implemented. The 0.4 valve factor as an operability basis was documented under CR 96-0594. Based on this approach, no operability concern existed, and therefore, no CR was generated.

During the GL 89-10 MOV close-out inspection, it was found the EPRI and Cook Nuclear Plant valves were not the same size or model. This invalidated the previous methodology, and the use of the 0.4 valve factor, which had been the best available data until this time.

The EPRI PPM algorithm value of 0.51 then became the best available design basis data, and was applied to the power operated relief valve thrust calculation.

The misapplication of the valve factor information resulted in our failure to initiate a CR and document an operability determination review.

3. Corrective Actions Taken and Results Achieved

On October 24, 1996, CRs 96-1699 and 96-1701 were written on the power operated relief block valves concerning the change in valve factor from 0.4 to 0.51. An operability review was performed, using the 0.51 valve factor, under PMI-7030 and PMSO.173. This review found 1-NMO-152 to be inoperable under full design temperature and pressure. A licensee event report was submitted, valve 1-NMO-152 was closed, and power was removed from the actuator as required by the T/S. An analysis has been performed to allow the use of this valve under 1500 psid for LTOP service.



To ensure additional occurrences of incorrect assumptions had not occurred, a review of our GL 89-10 best available data for valves factors was performed. The review noted one additional valve model (Conval) where the valve factor was based solely on EPRI testing of "similar" valves. Additional basis for the Conval valve factor was developed by review of differential pressure testing by other nuclear plants. The valve factor was found to be 1.3 versus 1.1 currently being used. An additional condition report, CR 96-2087, was generated and an operability review completed. The review showed the current actuator setting for the Conval valves is correct, and the valves will perform their design function.

4. Corrective Actions to Avoid Further Violations

Corrective actions previously taken in response to the notice of violation contained in inspection report 96006 were judged to be adequate to ensure condition reports are initiated as required, with the exception of the highly technical issues associated with MOV thrust requirements.

The managers and engineers responsible for MOV's have been instructed to initiate a condition report when adverse information is received concerning MOV operability. The CR will ensure timely operability determination will be performed and documented in accordance with PMI-7030 and PMSO.173.

5. Date When Full Compliance will be Achieved

Full compliance was achieved on December 11, 1996, with the issuance of CR 96-2087.



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 FITZPATRICK, E. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele
 RECIP. NAME RECIPIENT AFFILIATION
 Document Control Branch (Document Control Desk)

SUBJECT: Forwards response to NRC 961227 ltr re violations noted in
 insp repts 50-315/96-12 & 50-316/96-12 on 961021-25 &
 961205. Corrective actions: CRs 96-1699 & 96-1701 were written
 on power operated relief block valves.

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Indiana Michigan
Power Company
500 Circle Drive
Buchanan, MI 49107 1395



January 27, 1997

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THIS 27th DAY OF JANUARY, 1997

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My Commission Expires: _____

jmb

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cc: A. A. Blind
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JAN WATSON
NOTARY PUBLIC, BERRIEN COUNTY, MI
MY COMMISSION EXPIRES FEB. 10, 1999

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