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 AUTH.NAME AUTHOR AFFILIATION
 ALEXICH,M.P. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele
 RECIP.NAME RECIPIENT AFFILIATION
 MURLEY,T.E. Document Control Branch (Document Control Desk)

SUBJECT: Forwards response to Generic Ltr 90-06 re Generic Issue 70
 on PORV & block valve reliability & Generic Issue 94 on addl
 low temp overpressure protection for LWRs.Tech Spec change
 will be proposed in early 1991.

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AEP:NRG:1131

Donald C. Cook Nuclear Plant Units 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
RESOLUTION OF GENERIC ISSUE 70, "POWER-OPERATED RELIEF VALVE AND
BLOCK VALVE RELIABILITY," AND GENERIC ISSUE 94, "ADDITIONAL LOW-
TEMPERATURE OVERPRESSURE PROTECTION FOR LIGHT-WATER REACTORS,"
PURSUANT TO 10 CFR 50.54(f) (GENERIC LETTER 90-06)

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

Attn: T. E. Murley

December 21, 1990

Dear Dr. Murley:

This letter is in response to Generic Letter 90-06 dated June 25, 1990. Enclosure A of the Generic Letter presents the staff position and recommendations for the resolution of Generic Issue 70, "Power-Operated Relief Valves and Block Valve Reliability," applicable to Westinghouse-designed plants with power-operated relief valves (PORVs). Enclosure B of the Generic Letter presents the staff position and recommendations for the resolution of Generic Issue 94, "Additional Low-Temperature Overpressure Protection for Light-Water Reactors," applicable to Westinghouse-designed plants, with or without PORVs and block valves. Cook Nuclear Plant Units 1 and 2 were designed by Westinghouse and have three sets of PORVs and block valves. Our response to these recommendations is provided in the attachment to this letter.

Technical Specifications changes will be proposed for Cook Nuclear Plant in response to Generic Letter 90-06. We propose to submit the changes early in 1991 with the intent to implement them by the end of the 1992 refueling outages.

Once our actions are completed, we will have implemented the staff recommendations with three exceptions, which are discussed in the attachment. One exception concerns incorporating valves in the PORV control air system into the IST Program (see response to Enclosure A, Action Item 2). The second exception concerns the limiting condition for operation for three PORVs and associated block valves in Modes 1, 2, and 3 (see response to Enclosure A, Action Item 3). The third exception concerns the applicability of low temperature overpressure protection (LTOP) in Mode 4 (see response to Enclosure B Action Item).

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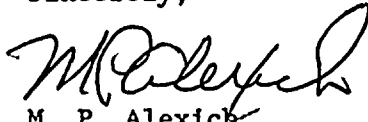
Dr. T. E. Murley

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This letter is submitted pursuant to 10 CFR 50.54(f) and, as such,
an oath is enclosed.

Sincerely,



M. P. Alexich
Vice President

ldp

Attachments

cc: D. H. Williams, Jr.
A. A. Blind
J. R. Padgett
G. Charnoff
A. B. Davis - Region III
NRC Resident Inspector - Bridgman
NFEM Section Chief

Dr. T. E. Murley

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AEP:NRC:1131

STATE OF OHIO)
COUNTY OF FRANKLIN)

Milton P. Alexich, being duly sworn, deposes and says that he is the Vice President of licensee Indiana Michigan Power Company, that he has read the foregoing Response to Generic Letter 90-06 and knows the contents thereof; and that said contents are true to the best of his knowledge and belief.

M. P. Alexich

Subscribed and sworn to before me this 21st
day of December, 1990.

Rita D. Hill
NOTARY PUBLIC

RITA D. HILL
NOTARY PUBLIC, STATE OF OHIO
MY COMMISSION EXPIRES 6-28-94



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ATTACHMENT TO AEP:NRC 1131

RESPONSE TO ACTIONS REQUESTED IN GENERIC LETTER 90-06

Enclosure A - Section 3.1, Staff Positions Resulting from Resolution of Generic Issue 70, "PORV and Block Valve Reliability"

Action Item 1

"Include PORVs and block valves within the scope of an operational quality assurance program that is in compliance with 10 CFR Part 50, Appendix B. This program should include the following elements:

- a. The addition of PORVs and block valves to the plant operational Quality Assurance List.
- b. Implementation of a maintenance/refurbishment program for PORVs and block valves that is based on the manufacturer's recommendations or guidelines and is implemented by trained plant maintenance personnel.
- c. When replacement parts and spares, as well as complete components, are required for existing non-safety-grade PORVs and block valves (and associated control systems), it is the intent of this generic letter that these items may be procured in accordance with the original construction codes and standards."

Response

This action is already established at Cook Nuclear Plant and includes the following elements, as requested:

- a. The PORVs and block valves are classified as QA-N in the plant Facility Data Base as a result of their pressure retaining function for the reactor coolant pressure boundary. It should be noted that the classification does not necessarily apply to non-pressure retaining components on these valves, as well as actuators, motor operators and associated air and control systems.
- b. Maintenance of the PORVs and block valves has been performed to date, on an as-required basis, in accordance with manufacturer's recommendations and by trained plant personnel. This will be enhanced during 1991 when the PORVs and block valves will be evaluated during the reliability-centered maintenance analysis of the reactor coolant system as part of our preventive maintenance upgrade program.

- c. Pressure retaining components of the PORVs and block valves have been and will continue to be procured in accordance with original construction codes and standards. This practice has not necessarily been applied to non-pressure retaining components, as well as actuators, motor operators and associated air and control systems. In the future, these items will be procured in accordance with original construction codes and standards.

Action Item 2

"Include PORVs, valves in PORV control air systems, and block valves within the scope of a program covered by Subsection IWV, 'Inservice Testing of Valves in Nuclear Power Plants,' of Section XI of the ASME Boiler and Pressure Vessel Code. Stroke testing of PORVs should only be performed during Mode 3 (HOT STANDBY) or Mode 4 (HOT SHUTDOWN) and in all cases prior to establishing conditions where the PORVs are used for low-temperature overpressure protection. Stroke testing of the PORVs should not be performed during power operation. Additionally, the PORV block valves should be included in the licensees' expanded MOV test program discussed in NRC Generic Letter 89-10, 'Safety-Related Motor Operated Valve Testing and Surveillance,' dated June 28, 1989."

Response

The purpose of the IST Program is to provide indication of component reliability. The PORVs and block valves are currently in the Cook Nuclear Plant second 10-year IST Program. A separate test of the valves in the PORV control air system, however, is not presently included in the IST Program. Given the existing configuration of the control air system, separate testing of its components within the IST Program would not be possible without significant system modifications and/or numerous exemptions.

Since current in-service testing of the PORVs already indirectly provides assurance of proper operation of the control air system, we do not intend to separately include the control air system components in the IST Program. Indirect testing will continue to be accomplished by testing the PORVs, on a cold shutdown frequency as covered by the IST Program, in accordance with plant procedures. This will include testing to ensure that the valves stroke using normal and backup air supplies.

Action Item 2 also states that the PORV block valves should be included in the MOV testing program discussed in NRC Generic Letter 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance." These valves have been included in the MOV testing program.

Action Item 3

"For operating PWR plants, modify the limiting conditions of operation of PORVs and block valves in the technical specifications for Modes 1, 2, and 3 to incorporate the position adopted by the staff in recent guidance. The staff recognizes that some recently licensed PWR plants already have technical specifications in accordance with the staff position. Such plants are already in compliance with this position and need merely state that in their response. These recent technical specifications require that plants that run with the block valves closed (e.g., due to leaking PORVs) maintain electrical power to the block valves so they can be readily opened from the control room upon demand. Additionally, plant operation in Modes 1, 2, and 3 with PORVs and block valves inoperable for reasons other than seat leakage is not permitted for periods of more than 72 hours."

Response

The Cook Nuclear Plant Technical Specifications for Modes 1, 2, and 3 will be modified to agree with those proposed by the staff with one exception. Given that we have three PORVs, we will propose that plant operation in Modes 1, 2, and 3 be permitted with one PORV or block valve inoperable for reasons other than excessive seat leakage. Operation in these modes with more than one PORV or block valve inoperable for reasons other than seat leakage will not be permitted for periods of more than 72 hours. Our proposed Technical Specifications changes, and related justification, to address this issue will be submitted to you separately in early 1991.

Enclosure B - Section 3, Staff Positions Resulting from Resolution of Generic Issue 94, "Additional Low Temperature Overpressure Protection for Light Water Reactors"

Action Item

". . . The current 7-day AOT for a single channel is considered to be too long under certain conditions. The staff has concluded that the AOT for a single channel should be reduced to 24 hours when operating in MODE 5 or 6 when the potential for an overpressure transient is highest."

Response

The Technical Specifications will be revised using the guidance in Attachment B-1 as it specifically applies to Cook Nuclear Plant. Recognizing that we rely on PORVs and the RHR safety valve for low temperature overpressure protection (LTOP) and that the applicability of the LTOP system is limited to temperatures below 170°F for Unit 1 and 152°F for Unit 2, the 7-day AOT for Mode 4 (> 200°F) is not applicable to Cook Nuclear Plant. Proposed Technical Specifications changes will also be addressed as part of the aforementioned submittal to be made in early 1991.