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 FITZPATRICK, E. Indiana Michigan Power Co. (formerly Indiana & Michigan Ele
 RECIP. NAME RECIPIENT AFFILIATION
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SUBJECT: Provides update of temp monitoring effort undertaken in
 response to NRC Bulletin 88-008, "Thermal Stresses in Piping
 Connected to Reactor Coolant Sys."

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AEP:NRC:1069E

Donald C. Cook Nuclear Plant Units 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
NRC BULLETIN NO. 88-08, "THERMAL STRESSES IN
PIPING CONNECTED TO REACTOR COOLANT SYSTEMS"

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

Attn: T. E. Murley

February 1, 1994

Dear Dr. Murley:

Reference: Letter, AEP:NRC:1069A, E. E. Fitzpatrick (AEP) to
Dr. T. E. Murley (NRC), NRC Bulletin 88-08, "Thermal
Stresses in Piping Connected to Reactor Coolant
Systems," dated October 29, 1992

This letter provides an update of the temperature monitoring effort undertaken in response to your staff's concern about thermal stratification in the auxiliary spray line. In our October 29, 1992, submittal, Indiana Michigan Power Company committed to instrument the Unit 1 auxiliary spray line, and obtain data for one fuel cycle to determine if the line was susceptible to fatigue cracking due to leakage past the auxiliary spray line isolation valves. We retained the option to take data for a second cycle if the first cycle's data were determined to be inconclusive.

Subsequent to issuing the reference letter, the Unit 1 auxiliary spray line was instrumented and data collected during the latest Unit 1 fuel cycle, which is scheduled to end in February 1994. The data obtained have been evaluated by Westinghouse, and a preliminary assessment has been completed. The data, which were taken, include upper and lower pipe temperatures at six locations (see Figure attached), main spray flows, pressurizer steam and liquid space temperatures, charging temperature, reactor coolant system temperatures, and primary loop flows.

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Dr. T. E. Murley

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AEP:NRC:1069E

The analysis of the data has led to the conclusion that there is leakage past the normally closed auxiliary valve, and thermal stratification does occur in the piping. Preliminary stress and fatigue analysis results indicate that the structural integrity of the auxiliary spray line would not be challenged due to leaks in the auxiliary spray isolation valve. Since the concern no longer exists regarding the adequacy of the data collected to date, it is our intention to terminate data collection at the end of the current cycle.

After we have evaluated the final Westinghouse report, which we expect to receive by July 1994, we will inform you of any action to be taken.

This letter is submitted pursuant to 10CFR50.54(f), and, as such, an oath statement is attached.

Sincerely,



E. E. Fitzpatrick
Vice President

RGV/cad

Attachments

cc: A. A. Blind
G. Charnoff
J. B. Martin - Region III
NFEM Section Chief
NRC Resident Inspector - Bridgman
J. R. Padgett

STATE OF OHIO)
COUNTY OF FRANKLIN)

E. E. Fitzpatrick, being duly sworn, deposes and says that he is the Vice President of licensee Indiana Michigan Power Company, that he has read the forgoing response concerning Bulletin 88-08, "Thermal Stresses in Piping Connected to Reactor Coolant Systems," and that said contents are true to the best of his knowledge and belief.

E. E. Fitzpatrick

Subscribed and sworn to before me this 1st
day of February, 19 94.

Rita D. Hill

NOTARY PUBLIC
RITA D. HILL
NOTARY PUBLIC, STATE OF OHIO
MY COMMISSION EXPIRES 6-23-94

ATTACHMENT TO AEP:NRG:1069E

AEP AUXILIARY SPRAY LINE FIGURE

