June 18, 1982
4400-82-L-0100

Office of Inspection and Enforcement
Attn: Mr. Ronald C. Haynes, Director
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Licensee Event Report 82-015/01L-0

Attached please find Licensee Event Report 82-015/01L-0, concerning
the failure of Incore Thermocouple D14 on May 17, 1982.

This event is a violation of Section 3.3.3.6, Table 3.3-10, item 10
and is reportable under Section 6.9.1.8 of the Interim Recovery
Technical Specifications.

Sincerely,

J. J. Barton
Acting Director, TMI-2

cc: L. H. Barrett, Deputy Program Director - TMI Program Office
    Dr. R. J. Snyder, Program Director - TMI Program Office
    V. Stello, Deputy Executive Director
    Operations & Generic Requirements
    U. S. Nuclear Regulatory Commission
    Washington, D.C. 20555
Incore Thermocouple D14 began to exhibit erratic behavior, therefore, in accordance with Technical Specifications 3.3.3.6, Table 3.3-10, item 10, this report is submitted. LER's 80-13, 80-41, 80-53, 81-05, and 81-13 concern thermocouple failures also. This event had no adverse effects on the plant, its operation, or the health and safety of the public.

The reason for the failure of Thermocouple D14 is not known and may not be possible to determine given the condition of the Unit 2 core relative to incore instrumentation. No corrective actions are appropriate relative to thermocouple failure. We are monitoring the situation to determine if any trend is becoming apparent and whether such a trend would have a safety impact in the long term.
I. EXPLANATION OF OCCURRENCE

Incore Thermocouple D14 began to exhibit erratic behavior; therefore, in accordance with Technical Specification 3.3.3.6, Table 3.3.10, Item 10, this report is being submitted.

To date, seven (7) LER's, including this one, concern thermocouple failures, the others are LER 80-13, LER 80-41, 80-50, 80-53, 81-05, and 81-13. This LER reports the first thermocouple failure since May 8, 1981.

There are now twelve (12) of the fifty-two (52) incore thermocouples reported as being out of service (D-14, E-11, G-5, H-9, K-12, L-5, L-11, L-13, M-9, N-8, N-9, and O-12). However, five (5) of these thermocouples (excluding E-11, G-5, H-9, K-12, L-6, L-11 and L-13) presently appear to be functioning properly and are being used to help monitor incore condition as long as they are functioning correctly.

II. CAUSES OF THE OCCURRENCE

The precise reason for the failure/erratic behavior of Incore Thermocouple D14 is not known and may not be possible to determine given the condition of the Unit 2 core relative to incore instrumentation.

III. CIRCUMSTANCES SURROUNDING THE OCCURRENCE

At the time of the occurrence, the Unit 2 facility was in a long-term, cold shutdown state. The reactor decay heat was being removed via loss to ambient. Throughout the event there was no effect on the Reactor Coolant System or the core.

IV. CORRECTIVE ACTIONS TAKEN OR TO BE TAKEN

IMMEDIATE

Incore Thermocouple D14 was checked to ensure that the problem is not in any component that is accessible for repairs.

No other immediate action is considered applicable.
LONG TERM

We are monitoring the situation to determine if any trend is becoming apparent and whether such a trend would have a safety impact in the long term. To date, no adverse trend in the overall incore thermocouple system behavior has become apparent.

V. COMPONENT FAILURE DATA

The failed thermocouple was a Type K (Chromium/Alumel) thermocouple, Model No. DAZA-76-7R-1B-1T-1C, supplied by Babcock and Wilcox and manufactured by Bel Fab, Inc.