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U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Subject: Reportable Occurrence at the Ohio State University Research
Reactor, License R-75, Docket No. 50-150

While operating the OSURR on January 9, 1992 it was determined that one of the two level safety systems was malfunctioning. According to Technical Specification 6.5.2 (3) this is a reportable occurrence. Details of the event and responses as required by 6.2.5 are described below.

At 1239 hours, after about 43 minutes of operation, a Senior Reactor Operator noticed that the high voltage supply to the detector for Level Safety B was turned off. The result was that that safety channel was not performing its intended function. In order to return the system to normal the high voltage was turned on.

Upon further examination it was determined that the system monitoring the high voltage supply should have indicated that power was off and have prevented the operation due to low voltage. This monitoring system was checked and functioning properly January 7, 1992. However, an LM339 comparator chip in this system failed before the January 9, 1992 operation. This chip was replaced and the monitoring circuit was tested as satisfactory on January 10, 1992. Although the probability of recurrence is deemed to be extremely low, to reduce this further a procedural change shall be made. As a part of the pre-start checkout, the detector's high voltage power supplies shall be checked for proper operation.

As required by T.S. 6.5.2 the Director of the OSURR, Don W. Miller, was notified. This report shall be submitted to him and shall be reviewed by the Reactor Operations Committee at its next meeting. In addition, as required by T.S. 6.6.2, a telephone report was made to NRC Region III on January 10, 1992. The report was made by Richard Myser of The Ohio State University to Jim McCormick-Barger of Region III.

If you have any questions on the content of this letter please contact Mr. Myser at 614-292-6755.

Sincerely

Robert F. Redmond, Director