

BBS Ltr. #137-75

Dresden Nuclear Power Station R. R. #1 Morris, Illinois March 7, 1975

Mr. James G. Keppler, Regional Director Directorate of Regulatory Operations-Region III U. S. Regulatory Commission 799 Roosevelt Road Glen Ellyn, Illinois 60137

SUBJECT: REPORT OF ABNORMAL OCCURRENCE PER SECTION 6.6.A OF THE TECHNICAL SPECIFICATIONS

2A MSTV NOT FULL OPEN SCRAM

Reference: 1. Regulatory Guide 1.16 Rev. 1 Appendix A

 Notification of Region III of U. S. Nuclear Regulatory Commission Telephone: Mr. T. Johnson, 1540 hours on February 28, 1975 Telegram: Mr. J. G. Keppler, 1550 hours on February 28, 1975

Report Number: 50-249/1975-9

Report Date: March 7, 1975

Occurrence Date: February 28, 1975

Facility: Dresden Nuclear Power Station, Morris, Illinois

IDENTIFICATION OF OCCURRENCE

During a main steam isolation valve (MSIV) not full open scram test, relay 590-102B failed to de-energize. This switch represents one of several redundant switches which actuate the reactor Protection System.

CONDITIONS PRIOR TO OCCURRENCE

Prior to the failure the unit was in the "Run" mode with a thermal power of 1249 megawatts. The unit electrical load was 392 megawatts and surveillance testing of the MSIV's was in progress.

DESCRIPTION OF OCCURRENCE

On February 28, 1975, at about 0400 hours, relay 590-102B failed to de-energize during the MSIV not full open scram surveillance of the 3-203-2A valve.

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DESIGNATION OF AFPARENT CAUSE OF OCCURRENCE (Equipment Failure)

The apparent cause of the failure appeared to be a faulty limit switch on the 3-203-2A MSIV. The surveillance test requires that the 2A MSIV be closed and verification made to insure that the 590-102A & B relays de-energize. Inspection of the relays showed that the 102A relay de-energized but that the 102B relay did not. No problem was found upon inspection of the 3-203-2A valve. The limit switch was operated manually several times and the limit switch operated correctly. Following manual operation, the valve was tested electrically several times and again no problem was noted.

ANALYSIS OF OCCURRENCE

The failure of the 2A limit switch did not place the safety of the plant or public in jeopardy. The failure of one limit switch would not have prevented a reactor scram due to redundant logic. Also, at the time of the failure all other isolation valves and safety systems were functional.

CORRECTIVE ACTIONS

The immediate corrective action taken was to remove the 590-702B fuse. Fuse 590-702B is in the feedline to relay 590-102B. Removal of the fuse de-energized the 590-102B relay to place the system in a fail safe condition. The 3-203-2A valve was inspected to verify the condition of the valve limit switch. The limit switch was operated several times manually and electrically without a recurrence of the problem. During the next extended maintenance outage the limit switch will be given a thorough inspection.

FAILURE DATA

The previous failure of a main steam line limit switch occurred on July 28, 1974 in connection with the 3-203-1B isolation valve. The failure at that time was attributed to the limit switch arm locking nut which had backed off, thereby allowing the arm to swing free.

Cuthur M Roberts
for B. B. Stephenson
Superintendent

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File/AEC