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Regulatory File Cy.

BBS Ltr. #42-75

Dresden Nuclear Power Station
R. R. #1
Morris, Illinois 60450
January 20, 1975

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

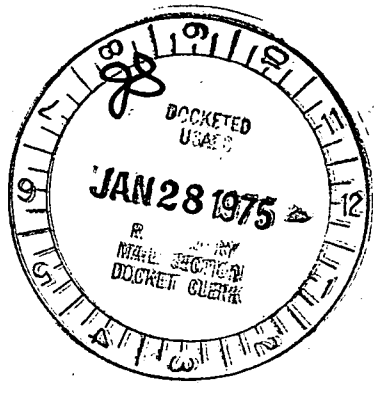
SUBJECT: REPORT OF ABNORMAL OCCURRENCE PER SECTION 6.6.A OF THE TECHNICAL SPECIFICATIONS
REACTOR LOW-LOW LEVEL ECCS INITIATING LEVEL SWITCH TECH. SPEC. LIMIT TRIP SETPOINT EXCEEDED

References: 1) Regulatory Guide 1.16 Rev. 1 Appendix A

2) Notification of Region III of AEC Regulatory Operations
Telephone: Phil Johnson, 1630, 1-14-75
Telegram: J. Keppler, 1123, 1-15-75

3) M-26 Drawing

4) 12E2430



Report No.: 50-237/1975-1

Report Date: January 20, 1975

Occurrence Date: January 10, 1975

Facility: Dresden Nuclear Power Station, Morris, Illinois

IDENTIFICATION OF OCCURRENCE

During performance of the routine monthly surveillance of the reactor low-low level test for HPCI, LPCI, core spray, and auto blowdown on Dresden Unit 2, it was discovered that the emergency core cooling low water level switch, LIS-263-72B (contact terminals 7 &8), tripped at a differential pressure of 120 inches of water. This value exceeded the technical specification limit of a differential pressure of 114.3 inches of water (equivalent to -59 inches on the instrument).

CONDITIONS PRIOR TO OCCURRENCE

Unit #2 was shutdown in the Refuel Mode. The Instrument Mechanic was performing the routine monthly surveillance of the emergency core cooling low-low water level switch, 263-72B.

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DESCRIPTION OF OCCURRENCE

At approximately 1600 hours on December 10, 1974, while performing the routine monthly surveillance of the Emergency Core Cooling Low Water Level, the initiating level switch, 263-72B (contact terminals 7 and 8), was found to trip at a differential pressure of 120 inches of water which exceeded the technical specification limit of a differential pressure of 114.3 inches of water.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE (Other)

The apparent cause of the abnormal occurrence was misalignment of the Mercoid switch (contact terminals 7 and 8) in level switch 263-72B. The instrument foreman was contacted and initial investigation indicated that the switch contact was not positioned parallel with the switch magnet.

ANALYSIS OF OCCURRENCE

Level switch 263-72B is one of four switches which provide signal indication for initiation of HPCI, LPCI, core spray and auto blowdown. The level switches are connected in a one out of two-twice logic array. This logic array connection allows for failure of one of the four switches without initiating emergency core cooling. The three other level switches 263-72A, C and D were checked on 10 January, 1975 and found to have setpoints within Technical Specification limits. If an actual reactor water low-low level had occurred, HPCI, LPCI, core spray and auto blowdown would have been initiated. Therefore, it is concluded that the safety of plant personnel or the general public was not jeopardized by this occurrence.

CORRECTIVE ACTION

The switch was positioned correctly and the setpoint was adjusted to a differential pressure of 112.8 inches of water increasing the Dresden limit is a differential pressure of 112 $\pm$ 1 inch of water increasing.

However, to verify that the problem was misalignment of the mercoid switch and not a failure of the mercoid switch, prior to plant startup following the present outage, the level switch will be cycled approximately 20 times and checked for repeatability of the switch trip setpoint.

FAILURE DATA

Switch263-72B is a Yarway Model 4418C level indication switch.

Similar failures of this type have not been noticed in a review of the previous history records.

B. B. Stephenson
Superintendent

BBS:WEH:smp
File/AEC