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Regulatory File Cy.

BBS Ltr # 194-75

Dresden Nuclear Power Station
R. R. #1
Morris, Illinois 60450
March 27, 1975

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

SUBJECT: REPORT OF ABNORMAL OCCURRENCE PER SECTION 6.6.A OF THE TECHNICAL SPECIFICATIONS
MAIN STEAM LINE LOW PRESSURE INSTRUMENT DRIFT

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

2) Notification of Region III of U. S. Nuclear Regulatory Commission
Telephone: P. Johnson, 1430 hours on March 18, 1975
Telegram: J. Keppler, 1430 hours on March 18, 1975

Report Number: 50-237/1975-17

Report Date: March 27, 1975

Occurrence Date: March 17, 1975

Facility: Dresden Nuclear Power Station, Morris, Illinois 60450

IDENTIFICATION OF OCCURRENCE

Main Steam Line Low Pressure Switches 261-30A-D were found to have trip setpoints from 835 to 845. The trip setting is identified by table 3.2.a of the technical specification as greater than or equal to 855 psi (includes 5 psi head pressure).

CONDITION PRIOR TO OCCURRENCE

Dresden Unit 2 was in the cold shutdown mode with zero power (MWt and MWe). Routine instrument surveillance was in progress. Dresden Unit 2 has been shutdown since November 2, 1974 for refueling.

DESCRIPTION OF OCCURRENCE

During routine surveillance of the main steam line low pressure switches 261-30A, B, C and D on March 17, 1975, the switch setpoints were found to exceed the

technical specification limit. The switch setpoints were immediately reset within Dresden setpoint limit of 871 ± 4 psi.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE (Equipment Failure)

The apparent cause of this occurrence is instrument drift which probably occurred between the time Dresden Unit 2 was shutdown on November 2, 1974 for refueling and March 17, 1975 when instrument surveillance was accomplished. The most recent instrument surveillance, prior to March 17, 1975, was October 26, 1974, prior to the Unit 2 shutdown for refueling on November 2, 1974.

ANALYSIS OF OCCURRENCE

The function of these pressure switches is to initiate a main steam isolation (Group 1) in the event of a break in the main steam line. Previous surveillance, performed on October 26, 1974 (7 days prior to start of refueling outage), showed the switch setpoints to be within Dresden setpoint limits. Evaluation of the change in the month to month surveillance readings for the Barksdale precycled pressure switch type B27-A12SS (GE) from the installation date on January 12, 1974, to October 26, 1974, indicates the switch has not exceeded a 10 psi drift per month. Using a 10 psi per month drift rate, a setpoint of 871 psi minus 10 psi = 861 psi which is within the Technical Specification limit of 855 psi. It is concluded therefore, that the switch setpoint had not exceeded technical specification limits between the time of October 26, 1974 and the refueling shutdown date of November 2, 1974. Since the Unit has been in the shutdown mode since November 2, 1974 and the present date it is concluded that no safety hazard to the installation personnel or to the public resulted from this deviation from Technical Specification.

CORRECTIVE ACTION

The immediate corrective action was to adjust the switch setpoints within Dresden setpoint limit of 871 ± psi.

It has been concluded from the data analyzed, that increasing the Dresden setpoint in November 1972 and monthly surveillances have prevented Technical Specification setpoint violations for the main steam low pressure switch and that the out-of-specification readings obtained on March 17, 1975, can be attributed to instrument drift during the period of reactor shutdown when monthly surveillances were not maintained.

Corrective action taken to prevent repetition of the occurrence will be to maintain monthly surveillance during reactor operation until a suitable replacement pressure switch with minimal drift characteristics can be obtained.

During extended periods of shutdowns, such as refueling outages, infrequent surveillances will be conducted.

FAILURE DATA

The instrument which drifted below the technical specification value was Barksdale pre-cycled pressure switch type B27-A12 SS (GE).

Review of the instrument surveillance data shows this occurrence to be the only deviation from Technical specification limits on Dresden Unit 2 Barksdale pressure switches 261-30A-D from November 20, 1972, through January 12, 1974, when Barksdale precycled switch was installed, to October 26, 1974, when the last surveillance prior to shutdown for refueling was accomplished. The latest deviation for the same type Dresden Unit 3 pressure switch 261-30 A-D, (pre-cycled switch installed on June 31, 1974) was April 19, 1973.

From the time of 11 April 1972, to the time of installation of the pre-cycled Barksdale pressure switch there had been 11 times during which similar type switches have deviated below the technical specification limit. Since the installation of the pre-cycled Barksdale pressure switch (January 12, 1974 for Unit 2 and June 31, 1974 for Unit 3) this has been the first occurrence of this type of switch deviating below the technical specification limit.

Sincerely,

Arthur M Roberts

for B. B. Stephenson
Superintendent

BBS:WEH:smp

File/AEC