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Regulatory

File Cy.

BBS Ltr #906-74

Dresden Nuclear Power Station
 R. R. #1
 Morris, Illinois 60450
 December 19, 1974

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
 MAIN STEAM LINE AREA TEMPERATURE SWITCH SETPOINT VIOLATION

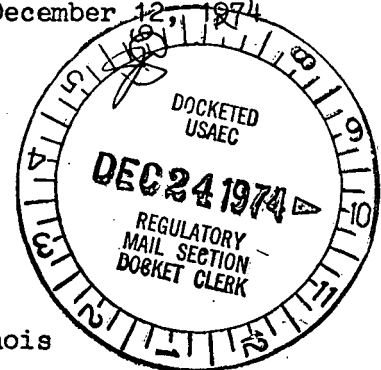
- References:
- 1) Regulatory Guide 1.16 Rev. 1 Appendix A
 - 2) Notification of Region III of AEC Regulatory Operations
 Telephone: P. Johnson, 1615 hours, December 11, 1974
 Telegram: J. Keppler at 0930 hours, December 12, 1974
 - 3) Drawing Number 12E2501

Report Number: 50-237/1974-74

Report Date: December 19, 1974

Occurrence Date: December 11, 1974

Facility: Dresden Nuclear Power Station, Morris, Illinois



IDENTIFICATION OF OCCURRENCE

Main Steam Line (MSL) area temperature sensors 261-15A thru D, 261-16A thru D, 261-17A thru D and 261-18A thru D were found with setpoints above the 200°F Technical Specification Limit.

CONDITION PRIOR TO OCCURRENCE

Dresden Unit 2 was in the shutdown mode with a refueling outage in progress.

DESCRIPTION OF OCCURRENCE

During the routine scheduled calibration of the MSL area temperature sensors, the setpoints were found to be above the 200°F limit. The reactor was in

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the shutdown mode with the head removed, therefore no immediate corrective action was necessary.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE (DESIGN ERROR)

Existing temperature sensors are not suited for a "first operation" surveillance type operation.

ANALYSIS OF OCCURRENCE

The function of the temperature sensors is to isolate the Main Steam Lines in the event of a steam leak in the outboard Main Steam Line Isolation Valve Area. The "as-found" setpoint of the 16 switches involved would have provided an isolation at 236°F.

CORRECTIVE ACTION

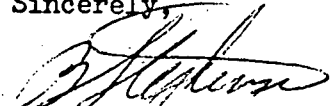
To prevent a future occurrence, a plant modification (M-12-2-74-175) will be made. Numerous problems exist with the calibration technique required for this type of Fenwal switch. The modification will install a liquid filled temperature sensor which can be more accurately calibrated and whose setpoint is more consistent.

FAILURE DATA

Numerous setpoint violations have been found on Fenwal temperature sensors on both Dresden Units 2 and 3. Subsequent investigation has determined that the existing switches are misapplied in that an accurate "first operation trip set point" cannot be consistently obtained. The manufacturer of the switches (Fenwal, Inc.) has investigated the problem and has stated that the existing switches are not properly suited when a "first operation trip setpoint" is required.

The switches involved are Fenwal Series 1700 hermetically sealed thermostatic type units.

Sincerely,



B. B. Stephenson

BBS:WEH:smp