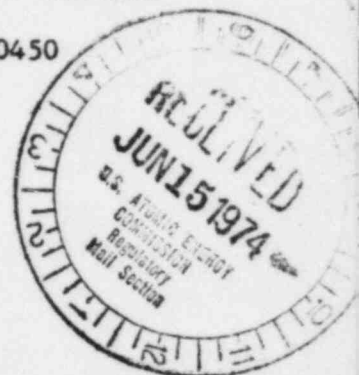




Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to Post Office Box 767
Chicago, Illinois 60690

BBS Ltr.#421-74

Dresden Nuclear Power Station
R. R. #1
Morris, Illinois 60450
June 12, 1974



Mr. J. F. O'Leary, Director
Directorate of Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

SUBJECT: LICENSE DPR-25, DRESDEN NUCLEAR POWER STATION, UNIT #3, REPORT OF ABNORMAL OCCURRENCE PER SECTION 6.6.B.1.a OF THE TECHNICAL SPECIFICATIONS.
HPCI LOW PRESSURE ISOLATION INSTRUMENT DRIFT.

References: 1) Notification of Region III of AEC Regulatory Operations
Telephone: Mr. F. Maura, 1330 hours on June 4, 1974
Telegram: Mr. J. Keppler, 1425 hours on June 4, 1974

2) Dwg: P & ID M-5i
S&L 12E2528

Dear Mr. O'Leary:

This letter is to report a condition relating to the operation of the unit at about 1600 hours on June 3, 1974. At this time, high pressure coolant injection (HPCI) low pressure trip switches PS2389 A, B, C and D were found with setting above 90 psig. This malfunction is contrary to section 3.5.C.1 of the Technical Specifications which requires that HPCI be operable whenever reactor pressure is equal to or greater than 90 psig.

PROBLEM

At the time of the occurrence, Unit 3 was in the refuel mode, with normal refuel surveillance in progress. During routine surveillance of PS2389 A through D, all four switches were found with setpoints above the Technical Specification of ≤ 90 psig. The switches were immediately recalibrated to comply with the Technical Specifications. The "as found" and "as left" settings were as follows:

PS	"As Found" at switch	Less Head Correction	Equivalent Rx Pressure	"As Left" at switch
2389A	125 psi	25 psi	100 psi	109 psi
2389B	118 psi	25 psi	93 psi	109 psi
2389C	125 psi	25 psi	100 psi	110 psi
2389D	121 psi	25 psi	96 psi	107 psi

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COPY SENT REGION 3

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June 12, 1974

The pressure switches in question are Barksdale Model B2T-A12SS with bourdon tube operators. The function of the switches is to trip the HPCI turbine when reactor pressure drops below the pressure range at which the HPCI turbine is operable. To comply with the Technical Specifications, the switches must reset below 90 psi increasing pressure.

INVESTIGATION

The Barksdale Model B2T-A12SS has had a history of setpoint drift. The problem has been defined by the vendor as a lack of pre-cycling prior to installation. The setpoint on the 2389 A through D switches drifts in both the increasing and decreasing direction. This is symptomatic of an unstable switch. The pre-cycling process stabilizes all mechanical components in the switch, and thus decreases drift. A program is presently underway to return all Barksdale switches to the factory for pre-cycling.

CORRECTIVE ACTION

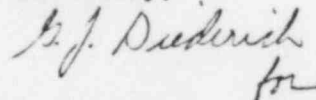
The switches were immediately reset to comply with the Technical Specifications. The switches will be returned to the factory for pre-cycling as soon as practicable.

EVALUATION

The electrical arrangement of the 2389 A through D switches is such that the HPCI turbine would have been operable at 96 psig. Previous testing of the switches was performed on February 9, 1974, when they were found to be within specifications. At the time of the occurrence, the reactor was in the refuel mode and HPCI operability was not required. It is therefore concluded that the safety of the general public or plant personnel was not jeopardized as a result of this occurrence.

The cumulative experience to date indicates that pre-cycling is the proper course of action to limit setpoint drift on Barksdale switches. Switch setpoint history will be observed after the switches are pre-cycled to assure the corrective action is adequate.

Sincerely,



B. B. Stephenson
Superintendent

BBS:WEH:do