



Commonwealth Edison

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WPW Ltr.#865-73

Dresden Nuclear Power Station
R. R. #1
Morris, Illinois 60450
November 20, 1973

50-249

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 OF THE
TECHNICAL SPECIFICATIONS,
HPCI SYSTEM HIGH STEAM FLOW ISOLATION SWITCHES OUT OF CALIBRATION.

References: 1) Notification of Region III of AEC Regulatory Operations
Telephone: H. Dance 1430 hours on November 13, 1973.
Telegram: J. Keppler 1500 hours on November 13, 1973

2) Dwgs: P & ID M-51.

Dear Mr. O'Leary:

The following is to report a condition relating to the operation of the unit in which at 1600 hours on November 12, 1973, the steam flow switches for the High Pressure Coolant Injection System were found to be out of calibration.

This is a violation of Table 3.2.1 of the Technical Specifications which require a setting of $\leq 150''$ H₂O dp increasing.

PROBLEM

The switches in question are dpis 3-2352 and 3-2353. They are Barton model 288 differential sensors and were found with setpoints of 152" water and 160" water respectively.

INVESTIGATION

The function of these switches is to isolate the High Pressure Coolant Injection System (HPCI) in the event of a break in the steam supply line. Barton model 288 switches have a history of setpoint drift in both the increasing and decreasing direction. The switches were last calibrated on October 9, 1973. At that time, switch DPIS 3-2352 was set at 144.5" water and DPIS 3-2353 was set at 148.0" water. These switches therefore drifted 7.5" and 12" respectively in a period of 32 days.

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CORRECTIVE ACTION

These switches were immediately reset to comply with the Technical Specification. The problem with Barton switches is presently under investigation by the Dresden Instrument Department, the local sales representative of ITT Barton Company, and ITT Barton Factory representatives.

The local sales representatives have made several field trips to Dresden Station and have analyzed several switches which have a drift history. They have found several significant problems on several switches which include mis-applications and loose or distorted components. The representative will return to complete an analysis on all problem switches and a plan to implement their recommendations will be formulated.

EVALUATION

The switches did not trip at the desired setpoint but did trip, and would have functioned at a differential pressure of 152", which is only 2" above the Technical Specification limit. It is therefore concluded that the safety of the station personnel or the general public was not jeopardized as a result of this instrument drift.

The corrective actions in progress are directed toward reducing setpoint drift problems. In the meantime, redundancy in similar systems' instrumentation, shortened intervals between surveillance tests, and conservative setpoint values have reduced the effect of these drifting setpoints to where continued operation of the units is safe.

Sincerely,

W. P. Worden

W. P. Worden
Superintendent

WPW:do