

ATTACHMENT TO LER 81-10/3L
NORTHEAST NUCLEAR ENERGY COMPANY
MILLSTONE NUCLEAR POWER STATION - UNIT 1
PROVISIONAL LICENSE NUMBER DPR-21
DOCKET NUMBER 50-245

IDENTIFICATION OF OCCURRENCE

Engineered safety feature instrument settings were found to be less conservative than those established by the technical specifications.

CONDITIONS PRIOR TO OCCURRENCE

Prior to the occurrence the unit was in the cold shutdown mode for performance of main turbine repairs.

DESCRIPTION OF OCCURRENCE

On May 15, 1981 at 1540 hours while performing routine surveillance, Break Detection Valve Permissive Functional and Calibration Test, the following switches were found to trip outside their required trip setpoint band:

<u>Switch Number</u>	<u>As Found Trip Pressure</u>
2271-261-36B	0.7 psid
2271-261-37B	0.8 psid
2271-261-39B	0.6 psid

These switches are an integral part of the break detection logic system and sense differential pressure across the B reactor recirculation pump. Technical Specification Table 4.2.1 requires that the setpoint of these switches be 2.0 ± 0.9 psid.

Additionally, two switches in the logic system that sense reactor pressure and one switch that senses jet pump riser differential pressure tripped outside their allowable setpoint bands, but in a conservative direction that posed no safety implications.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE

Failure of the switches in question to trip at their desired setpoint is attributable to setpoint drift.

ANALYSIS OF OCCURRENCE

The break detection logic system monitors reactor recirculation loop parameters to provide permissive signals for LPCI injection into the intact loop in the event of a loss of coolant accident. In particular, the switches in question sense reactor recirculation pump differential pressure to determine whether the pump is in service. Under certain conditions with the pump out of service, failure of these switches to trip at their desired setpoint may have resulted in injection into the improper loop. This scenario would not result in an unanalyzed condition. Previous analysis has shown that Emergency Core Cooling System capacities are sufficient to provide adequate core cooling in the event of this type of failure.

CORRECTIVE ACTION

The switches in question were recalibrated to meet their required trip setpoint criteria and were satisfactorily tested. Additionally, these switches will be tested on a monthly basis until it can be determined whether this was an isolated problem or if a trend is developing.

The differential pressure switches in question are Carton Model 288, having a trip setpoint range of 0-60 psid.