

ATTACHMENT TO LER 81-16/3L
NORTHEAST NUCLEAR ENERGY COMPANY
MILLSTONE NUCLEAR POWER STATION - UNIT 1
PROVISIONAL LICENSE NUMBER DPR-21
DOCKET NUMBER 50-245

IDENTIFICATION OF OCCURRENCE

Reactor protection signal was not generated from a Main Steam Isolation Valve ten percent closed.

CONDITIONS PRIOR TO OCCURRENCE

The Unit was at thirty percent power during an ascension.

DESCRIPTION OF OCCURRENCE

On June 18, 1981 at 1125 hours while performing Main Steam Isolation Valve closure functional surveillance test, the relay did not de-energize when the Main Steam Isolation Valve (1-MS-1C) was actuated to a 10 percent closed position. Technical Specification 2.1.2.6 requires a Main Steam Isolation closure scram signal when the MSIV is less than or equal to ten percent closed from full open. The 'C' Main Steam line was isolated and the containment was entered for inspection of the MSIV switch which should had de-energized the relay.

APPARENT CAUSE OF OCCURRENCE

Containment entry and investigation revealed that the actuating arm on the ten percent closed limit switch had come out of adjustment. This prevented the Reactor Protection relay from being de-energized at the ten percent closed valve position which in turn would prevent a scram.

ANALYSIS OF OCCURRENCE

The Main Steam Line Isolation valve closure scram is set to scram when the isolation valves are ten percent closed from full open in three out of four lines. This scram anticipates the pressure and flux transients which occur during normal or inadvertent isolation valve closure. By scrambling at this setting the resultant transient is insignificant.

The occurrence provided no decrease in protection, only decrease in redundancy. Each valve has a switch/relay system in each protection system logic channel. Although one logic channel for the 'C' switch did not trip, the other logic channel did trip and it would had initiated the required trip had the valve actually closed ten percent from full open.

CORRECTIVE ACTION

The arm on the limit switch was readjusted by tightening the set and locking screw securely.

The Main Steam Isolation Valve position switch was manufactured by NAMCO and is a type SL-3.

Reoccurrences of this situation have been: 79-11/3L