

VTVYS1
05000271
LER 81-01/3L

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES

During routine surveillance testing at 38% reactor power, MSIV 80 B and MSIV 86 A were found to close in 5.5 and 5.3 seconds respectively, which exceeds the Tech. Spec. limit of 5 seconds. As required by Tech. Spec. Section 3.7.D.2, MSIV 80 A and MSIV 86 B were closed.

Additionally, while testing MSIV 80 C, relay 5A-K 3F failed to de-energize due to a failed limit switch in the closed position on MSIV 80 C. Vermont Yankee incorrectly reported this occurrence a 24 hour reportable occurrence (LER 81/01/1P). Further investigation has determined that 4 instrument channels per trip system were operable as required by Tech. Spec. Table 3.1.1 since closure of MSIV 86 C did cause relay 5A-K3F to operate. RPS Limit switches on MSIV 80 C and MSIV 86 C are redundant and it was determined that this instrument channel was operable but degraded. If a Group 1 isolation signal had occurred, a reactor scram would have resulted as required.

Since the second isolation valve in main steam lines A, B and C was operable as required by Tech. Spec., there were no potential consequences to the health and safety of the general public. Similar slow MSIV closure times were reported in LER 79-29 and LER 78-32.

CAUSE DESCRIPTION AND CORRECTIVE ACTION

The cause of MSIV 80 B slow closure time was due to improper adjustment of the hydraulic dash pot closure time adjustment mechanism. The valve actuator had been rebuilt and preventative maintenance had been performed during the annual refueling outage. The hydraulic dash pot had been adjusted with the valve in the cold condition. Valve closure time was within Tech. Spec. requirements in the cold condition but changed slightly in the hot condition. Readjustment of the hydraulic dash pot returned MSIV 80 B to the required Tech. Spec. closing time.

The cause of MSIV 86 A slow closure time was determined to be due to a broken spring in the hydraulic dash pot closure time adjustment mechanism (a Colorflow Control, 3/8 Range, manufactured by Manatol of Elyria, Ohio). The broken spring was replaced, the hydraulic dash pot was reassembled and adjusted and MSIV 86 A was subsequently retimed and determined to close within the required Tech. Spec. closure time.