

ATTACHMENT TO LER 79-08/3X-1
(UPDATE REPORT)
NORTHEAST NUCLEAR ENERGY COMPANY
MILLSTONE NUCLEAR POWER STATION - UNIT 1
PROVISIONAL LICENSE NUMBER DPR-21
DOCKET NUMBER 50-245

IDENTIFICATION OF OCCURRENCE

Operation in a degraded mode permitted by a limiting condition for operation occurred when a primary containment isolation valve failed to travel to the mode corresponding to the normal operating condition and resulted in an inoperable Isolation Condenser System.

CONDITIONS PRIOR TO OCCURRENCE

Prior to the occurrence the plant was operating at 100 percent steady state power.

DESCRIPTION OF OCCURRENCE

On February 14, 1979, while returning to a normal valve lineup following completion of routine Isolation Condenser Isolation Instrumentation Functional and Calibration Test, the Isolation Condenser Inboard Steam Supply Valve, 1-IC-1 lost position indication. All other isolation valves in the system did travel to their proper position. The 1-IC-1 valve was declared inoperable and the surveillance required, when a primary containment isolation valve is inoperable, was performed. In doing so, the Isolation Condenser System was declared inoperable and the surveillance required when the Isolation Condenser System is inoperable, was performed.

On February 21, 1979, at 2100 hours a planned shutdown was commenced for the repair of 1-IC-1.

DESIGNATION OF APPARENT CAUSE

On February 22, 1979, after unit shutdown and cooldown, a drywell entry was made to determine the problem with the 1-IC-1 valve. Investigation revealed the fact that the gear casing on the valve operator had fractured. This allowed the gear operator to separate from the valve. Vendor analysis attributes this occurrence to failure of the yoke sleeve flange due to repeated excessive thrust loads, most likely resulting from excessive torque being applied to the valve yoke sleeve.

ANALYSIS OF OCCURRENCE

Failure of the Isolation Condenser Inboard Steam Supply Valve 1-IC-1, to operate did not create a condition which had not been previously analyzed.

The Isolation Condenser Outboard Steam Supply Valve, 1-IC-2, did operate properly and would have been sufficient to maintain the required integrity. All surveillances that are required to be performed, when a primary containment isolation valve is inoperable and when the Isolation Condenser System is removed from service, were performed.

CORRECTIVE ACTION

The subject valve operator was removed, rebuilt, reinstalled and tested. The motor operator is a Model T-40, manufactured by Crane Teledyne.

An alternate valve operator motor and motor gearing that will insure against excessive torque and thrust loads has been investigated, based on vendor analysis and recommendations. Plans have been made for installation during the 1980 Refuel Outage, pending availability of material.

Similar occurrences were described in R0-76-42/3L and R0-76-28/3L.