



I. Current Activities At The Time Of The Occurrence

TMI Unit 1 was in a long-term cold shutdown condition.

II. Circumstances Leading to the Occurrence

On 1/28/82, a leakage deposit was noted on the 2" nipple which connects to Auxiliary Bldg. side of valve WDG-V4, which is the containment isolation valve for the radioactive Waste Gas Disposal System in the Auxiliary Bldg. On 3/11/82, during the installation of the replacement pipe nipple, a second crack in an adjacent pipe was discovered.

III. Description

Unit #1 has been in extended cold shutdown since Hot Functional Testing completed in September 1981. As discussed above, leakage deposits observed visually on the piping near the WDG-V4 valve led to the discovery of first of two cracks. The second crack was discovered during the repair of the first. This item is considered reportable under Technical Specification 6.9.2.B.(4) as abnormal degradation of the Waste Gas Disposal System which is designed to contain radioactive material resulting from the fission process.

IV. Resultant Events

Since the Unit #1 reactor has been maintained in a subcritical condition since February 1979, the gaseous fission product inventories are greatly decayed from normal operating levels. Therefore, no significant releases to the filtered Auxiliary Bldg. Ventilation System could have occurred during TMI-1's present shutdown condition through these piping cracks.

V. Previous Events Of A Similar Nature

LER # 79-11/3L reported pipe cracking in the Spent Fuel Cooling System and LER 81-001/03L reported a socket weld crack in the Makeup and Purification System. No cracks have previously been discovered in the Waste Gas Disposal System piping.

VI. Root Cause

The cause of the pipe cracks is presently undetermined pending metallurgical examination and analysis.

VII. Immediate Corrective Action

The pipe section nearest WDG-V4 was replaced with new pipe. Non destructive examination of 10 welds downstream of WDG-V4 (a run of approximately 50 ft. of

pipings) and 6 welds (approximately 5 ft. of piping) upstream of WDG-V4 up to the Reactor Building Penetration 330 was conducted to establish the scope of cracking potentially present. No additional cracks were found.

VIII. Long Term Corrective Action

Both cracked pipes will be repaired or replaced as required. Both cracked pipes will be metallurgically examined and analyzed to determine root cause. Examination and analysis results, when available, will be forwarded in a followup report. Following repairs, the Waste Gas Disposal System piping will be subjected to a leak test.

XI. Component Failure Data

2-inch 304 stainless steel seamless schedule 40S piping (Heat affected zone of socket welds).