



- I. LER NUMBER: 83-007/01T-0
- II. LASALLE COUNTY STATION: Unit 1
- III. DOCKET NUMBER: 050-373/374
- IV. EVENT DESCRIPTION:

While performing drywell survey, Health Physics personnel noticed steam leakage from MSIV 1B21-F022C. Upon further investigation, it was determined that a crack existed in the weld materia' where 1MS14AC-2" drain line was attached to the valve body.

- V. PROBABLE CONSEQUENCES OF THE OCCURENCE:

At the time of this event, the plant was in the Start Up Mode holding at approximately 1% thermal power. The leak was noticed visually and was not of sufficient size to cause any increase in radiation levels. No release of radioactivity took place as a result of this event. When it was determined that the leak was in a part of the reactor coolant system pressure boundary and could not be adequately isolated to permit repair, shutdown was commenced in accordance with Technical Specification 3/4 4.3.2. This is a similar incident to LER 83-006/03L-0. Therefore, the health and safety of the public was not affected and safe operation of the plant was maintained at all times.

- VI. CAUSE:

Analysis by Sargent & Lundy, Systems Materials Analysis Department, Station Nuclear Engineering Department and LSCS revealed the most likely cause of failure to be improper weld application and installation by construction. Although no specific procedural non-compliances were noted, the application of pre-heat treatment as well as welding electrode used were determined less than optimum. Normal vibration was noted as possible in assisting crack propagation.

- VII. CORRECTIVE ACTION:

Work request L22331 was initiated to repair the leak. Using station maintenance procedures, the existing weld was ground out and the connection rewelded. The new weld was ground down to eliminate any notches between passes, and magnetic particle examined to ensure no existing cracks remained. Instrumentation was installed on the line to verify that no abnormal vibration amplitude or frequencies exist during normal modes of operation. An 1150 pound hydrostatic test was performed to verify the repair was satisfactory. As a long term corrective action, all main steam line drain to MSIV socket weld connections were rewelded and an investigation performed to ensure that no other similar installations exist.

Prepared by: Dale Spencer