

- I. LER NUMBER: 83-118/C3L-0
- II. LASALLE COUNTY STATION: Unit 1
- III. DOCKET NUMBER: 050-373
- IV. EVENT DESCRIPTION:

On September 26, 1983, the "D" Main Steam Line (MSL) Radiation Monitor (1D18-N003D) spiked upscale and then failed downscale. The "D" MSL Rad Monitor was "tripped" to satisfy Technical Specification 3.3.1, Table 3.3.1-1.

- V. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

There are 4 Main Steam Line (MSL) Rad Monitors. The monitors are geometrically arranged so that any single monitor is capable of detecting high radiation in any of the four lines. The monitors are labeled 1D18-N003 A/B/C/D and provide signals to the Reactor Protection System. MSL Rad Monitors "A" and "C" provide signals to Reactor Protection System (RPS) channels "A1" and "A2" and MSL Rad. Monitors "B" and "D" provide signals to RPS channels "B1" and "B2" respectively. The RPS logic is a one out of two taken twice logic, with channels "A1" and "A2" supplying the "A" Bus and channels "B1" and "B2" supplying the "B" Bus.

For a "Full Scram" to occur both the "A" and "B" Buses have to "de-energize". Since the channel "A1" and "A2", "B1" and "B2" contacts are arranged in series, either contact opening will "de-energize" its respective Bus.

When the "D" MSL Rad Monitor was declared inoperable, that channel was placed in the "tripped" condition which in turn "de-energized" channel "B2" opening its associated contacts. Placing the "D" MSL Rad Monitor in the "tripped" condition results in a "half scram" condition and also provides a tripped channel to Group I and III isolation logic. Any subsequent signal on Bus "A" will result in a "full scram" and isolation shutting down the reactor and placing the plant in a safe condition.

Since the Plant was placed in a conservative condition, the incident had no effect of the safe operation of the Plant.

- VI. CAUSE:

The cause for the sudden upscale spike and the subsequent downscale spike which remained downscale could not be determined. It appears that a spurious high voltage transient resulted in sending the meter hard upscale and then downscale causing the meter movement to lock-up on the downscale peg.

VII. CORRECTIVE ACTION:

Work Request (L28030) was generated and completed on September 26, 1983.

Troubleshooting of the instrument could not reveal a cause for the "D" MSL Rad Monitor occurrence. The calibration was checked and verified that zero instrument shift had occurred. The instrument was calibrated per LaSalle Instrument Surveillance LIS-MS-03. This appears to be an isolated occurrence.

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DMB

October 24, 1983

James G. Keppler
Regional Administrator
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Dear Sir:

Reportable Occurrence Report #83-118/03L-0 Docket #050-373 is being submitted to your office in accordance with LaSalle County Nuclear Power Station Technical Specification 6.6.B.2.(b), conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.

G. J. Diederich
Superintendent
LaSalle County Station

GJD/GW/rg

Enclosure

cc: Director of Inspection & Enforcement
Director of Management Information & Program Control
U.S. NRC Document Management Branch
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