



LICENSEE EVENT REPORT  
NARRATIVE REPORT  
TMI-II  
LER 83-01/01L-0  
EVENT DATES - January 4 and 25, 1983

I. EXPLANATION OF OCCURRENCE

During the "A" Once Through Steam Generator cleanup operations on January 4, 1983, at 1145 hours the Unit 2 Control Room personnel observed that the "A" Once Through Steam Generator (OTSG) pressure indication read less than zero. A rough calculation showed that the indication should have shown approximately 8 psig due to static head. (The "A" OTSG water level was verified to be at 715 inches on January 4, 1983.) Due to this discrepancy, the "A" OTSG pressure indication was declared inoperable. An investigation was initiated to determine the reason for the low indication.

For an extended period of time, the OTSG secondary side was maintained in a partially drained condition and at ambient pressure. As a result, the OTSG pressure instrument was reading at zero pressure, as expected. When the "A" OTSG was filled for OTSG cleanup operations using the OTSG Layup Recirculation System, some pressure indication was expected but not seen on the pressure instrument.

This condition placed the unit in the Action Statement of Technical Specifications 3.3.3.5 and 3.3.3.6, Tables 3.3-9 and 3.3-10, respectively. At 1945 hours, the Action Statement time clock (8 hours) for Technical Specification 3.3.3.5 was exceeded. This event is, therefore, reportable pursuant to Section 6.9.1.8(b) of the Recovery Technical Specifications.

On January 7, 1983, OTSG Pressure Transmitter SP-6B-PT2 for the "B" OTSG was declared out-of-service. On January 25, 1983, at 1100 hours, Pressure Transmitter SP-6B-PT-1 was declared out-of-service. With both of the "B" OTSG pressure transmitters inoperable, the unit again entered the Action Statement of Technical Specifications 3.3.3.5, Table 3.3-9. Note: Only the Action Statement for Section 3.3.3.5 was entered due to the installation of a local pressure gauge for monitoring the "B" OTSG pressure. For further information, see the Immediate Corrective Action Section of the LER.

II. CAUSE OF THE OCCURRENCE

These events were the result of the apparent inoperability of Pressure Transmitters SP-6A-PT1/2 (OTSG "A") and SP-6B-PT1/2 (OTSG "B") all of which are located on the 282'-6" elevation of the containment building. Due to the location of these transmitters, the root cause for the transmitter failures could not be determined.

III. CIRCUMSTANCES SURROUNDING THE OCCURRENCE

At the time of the occurrence, the Unit 2 facility was in a long-term cold shutdown state. The reactor decay heat was being removed via loss to ambient. Throughout the event there was no effect on the Reactor Coolant System or the core.

#### IV. CORRECTIVE ACTIONS TAKEN OR TO BE TAKEN

##### Immediate

After the declaration of inoperability of the "A" OTSG pressure instruments, all evolutions with the "A" OTSG were placed in a temporary shutdown mode. An investigation was initiated to identify and repair the problem. It was verified during the investigation that the signals emerging from the containment building indicated that the pressure transmitters were failed.

As a result of the "A" OTSG pressure transmitter failures, the need for monitoring the OTSG pressures during the OTSG cleanup evolutions and the inability to repair the installed instrumentation due to ALARA considerations, alternate pressure indication was installed on both OTSGs. The alternate pressure indication (0-60 psi) on the main steam line of the "A" OTSG and the emergency feedwater line of the "B" OTSG were installed on January 7 and 6, 1983, respectively. Also as a result of the "A" OTSG pressure transmitter failures, the "B" OTSG transmitters were checked on January 7, 1983. At that time, SP-6B-PT2 was discovered inoperable.

The alternate pressure instruments are considered adequate to satisfy the requirements of Technical Specification 3.3.3.6. Therefore, with respect to Section 3.3.3.6, the OTSG alternate pressure instruments are considered operable. However, the alternate pressure instruments are not sufficient to satisfy 3.3.3.5 since both pressure range (0-1200 psig) and instrument readout location are not met. Therefore, the "A" and "B" OTSG pressure indication remain inoperable insofar as Technical Specification 3.3.3.5 is concerned. Note: The interrupted OTSG cleanup operations were resumed after installation of the alternate pressure gauges. This was in compliance with Technical Specification 3.0.3.

##### Long-Term

Technical Specification Change Request No. 41 and Recovery Operations Plan Change Request No. 22 are being prepared to request deletion of the Technical Specification and Recovery Operations Plan requirements for the "A" and "B" OTSG pressure indication in Technical Specification 3.3.3.5, Remote Shutdown Monitoring Instrumentation, and to modify the surveillance requirements of Section 4.3.3.6 to reflect appropriate operability requirements for the alternate pressure instruments. These will be submitted in the near future.

#### V. COMPONENT FAILURE DATA

Foxboro Pressure Transmitters, Model No. E-11GM  
Manufactured by Foxboro Instrument Company