

LICENSEE EVENT REPORT
NARRATIVE REPORT
TMI-II
LER 82-034/01L-0
EVENT DATE - October 21, 1982

I. EXPLANATION OF OCCURRENCE

This event concerns the inoperability of the "A" and "B" Once Through Steam Generator (OTSG) level indicators. On October 21, 1982, at 1500 hours, the "A" OTSG level indication failed. Investigation determined the cause to be a separated electrical connection. However, during the investigation it was determined at approximately 1800 hours on October 21, 1982, that the "B" OTSG level instrument was also inoperable due to failed electronic components. Further, at approximately 0620 hours on October 22, 1982, it was discovered that the level indicators were isolated from the OTSG's as a result of having the OTSG Recirculation System Isolation valves (GR-V-7A/B) closed. The valves were opened, the level indicators were repaired, calibrated, and returned to service at 1730 hours on October 22, 1982.

This event was a violation of Technical Specification 3.3.3.6 - Table 3.3-10 and is considered reportable under Section 6.9.1.8(b and f) of the Recovery Technical Specifications.

The component failure part of this LER is similar in nature to LER 81-33.

II. CAUSE OF THE OCCURRENCE

The causes contributing to this event are as follows:

- The "A" OTSG level indication failure has been attributed to construction activity which caused the "A" output connector (banana plug type) to be pulled from the transmitter inadvertently.
- The "B" OTSG level indication failure was attributed to a failed 12 volt D.C. power supply and its associated carrier/demodulator board.
- The valves, GR-V-7A/B, which supplied OTSG level indication were verified as being open during the August 14, 1982, performance of Surveillance Procedure 4301-M8 (Containment Integrity Verification). During the September 15, 1982, and October 13, 1982, performance of 4301-M8, the valves were recorded as closed. These valves were closed in accordance with Surveillance Procedure 4301-M8. This procedure contains notations on these valves that allow them to be open under administrative control. However, valves GR-V-7A/B were identified on the Surveillance Procedure data sheet as "Recirc System Isolation" only and did not specify their OTSG level instrument isolation function. With that and since the OTSG Recirc System is not operable, it was not recognized that these valves should have been open.
- When the "B" OTSG level indication was calibrated, it was discovered that the instrument's gain had been changed.

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

The immediate corrective actions were:

- Replaced the "A" OTSG transmitter output plug into its receptacle.
- Replaced the "B" OTSG 12 volt D.C. power supply and carrier/demodulator board.
- Immediately opened valves GR-V-7A/B.
- Recalibrate the level indications in the Control Room.
- Secured OTSG level indication wiring to preclude any inadvertent bumping or removal of such wiring by personnel traffic.

Long Term

- To preclude any misunderstandings about the required positions of containment isolation valves, Surveillance Procedure 4301-M8 will be revised to reflect which valves should normally be open under Administrative Controls. This will be completed by December 30, 1982.
- To prevent any inadvertent changes in the indication's gain, the gain adjustment switch/control will be secured or relocated. This will be completed by January 31, 1982.

V. COMPONENT FAILURE DATA

- 12 volt D.C. Power Supply made by Power One, Inc., and distributed by Nuclear Services Corporation, Campbell, CA (stock symbol #811-354-6500)
- Carrier/Demodulator Board distributed by Nuclear Services Corporation, Campbell, CA (stock symbol #063-389-3000)