

Description of Event

On August 27, 1982, while performing a channel calibration on the Ventilation Vent B Gaseous Monitor, the detector response was found to be about 27 percent less than the calibration source. This exceeded the Acceptance Criteria of ± 10 percent. In accordance with T.S. 3.3.3.1, this channel was considered inoperable since the alarm setpoints of Table 3.3-6 were exceeded. The actions of T.S. 3.9.12 were implemented and a program for daily grab samples was instituted in accordance with E.T.S. 2.2.4.

Probable Consequences of Occurrence

The ventilation vent gaseous monitor is required by T. S. 3.3-6 to specifically monitor fuel building ventilation exhaust for indication of damage to spent fuel elements. In addition, the Environmental Technical Specification (E.T.S 2.2.4) requires a continuous monitoring of gaseous effluents. Since the gaseous radiation levels at the alarm setpoints are a small fraction (about 5%) of the release limits, the actuation of the alarm, even with the inaccuracy, would have provided sufficient indication of an abnormal gaseous release. Since the actions of T.S. 3.9.12 were implemented and the daily grab samples were taken until the channel was repaired the health and safety of the public were not affected.

Cause of Event

This event was caused by the gradual deterioration of the monitor's photomultiplier tube and preamplifier. This is considered a natural end of the life failure.

Immediate Corrective Action

The photomultiplier tube and preamplifier were replaced. The channel was calibrated satisfactorily.

Scheduled Corrective Action

No further actions required.

Action Taken To Prevent Recurrence

No further actions required.

Generic Implications

This event is considered an isolated failure.