



GPU Nuclear
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Writer's Direct Dial Number:

July 19, 1982

Mr. Ronald C. Haynes, Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Haynes:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report
Reportable Occurrence No. 50-219/82-35/03L

This letter forwards three copies of a Licensee Event Report to report Reportable Occurrence No. 50-219/82-35/03L in compliance with paragraph 6.9.2.b.2 of the Technical Specifications.

Very truly yours,

Peter B. Fiedler
Vice President and Director
Oyster Creek

PBF:lse
Enclosures

cc: Director (40 copies)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Director (3)
Office of Management Information and
Program Control
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

NRC Resident Inspector
Oyster Creek Nuclear Generating Station
Forked River, NJ 08731

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OYSTER CREEK NUCLEAR GENERATING STATION
Forked River, New Jersey 08731

Licensee Event Report
Reportable Occurrence No. 50-219/82-35/03L

Report Date

July 19, 1982

Occurrence Date

June 15, 1982
June 16, 1982

Identification of Occurrence

Operation under a Limiting Condition for Operation as defined in Technical Specifications, paragraphs 3.1.1-1.

This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraph 6.9.2.b.2.

Conditions Prior to Occurrence

Major plant parameters were as follows:

Power: Reactor 1459.4 MWt
 502 MWe

Mode Switch: RUN

Description of Occurrence

On Monday, June 14, 1982, after placing the Augmented Off-Gas Facility (AOG) in service, operators noticed that isolation valve V-7-31 did not indicate closed in the control room. Procedure 630.3.002, "AOG Isolation Valve Test" was performed and the valve operated satisfactorily.

On Tuesday, June 15, 1982, as a second check, the valve was cycled three times. During this cycling, proper valve indication was not obtained. In addition, when the AOG inlet flow and stack gas activity were compared to readings taken prior to cycling, there was a drop in the AOG inlet flow; and stack gas activity increased from 120 to 180 cps on one monitor and from 130 to 180 cps on another. This indicated that the off-gas isolation valve did not fully close. A normal plant shutdown was commenced.

Subsequent investigation revealed that one of two redundant solenoid valves had failed, not allowing the AOG isolation valve to fully close. The defective solenoid valve was removed from the system and the remaining solenoid valve was used for control. It should be noted that two solenoid valves are used in a "non-redundant" control scheme to improve mechanical reliability for certain failure modes (each is capable of operating the valve independently). Procedure 630.3.002 was performed once again, and it was found to be operating properly. At this point, the normal plant shutdown was terminated.

On Friday, June 18, 1982, the new solenoid valve was installed and the AOG facility was returned to service with two solenoid valves in operation.

Apparent Cause of Occurrence

It has been determined that the off-gas isolation valve failed to fully close due to a piece of foreign matter (apparently a piece of an old gasket) lodged under the seat of the solenoid valve. The present configuration is such that when a closed signal was initiated, one solenoid operated as expected, but the defective one allowed some air to the isolation valve diaphragm, not allowing it to fully close.

Analysis of Occurrence

When high radiation is detected in the off-gas system, the holdup line is automatically isolated via V-7-31, the off-gas isolation valve, after a 15 minute delay, which is provided to permit corrective action to be taken. Closing the off-gas isolation valve will prevent the release of high concentrations of radioactivity through the stack and will also isolate the Augmented Off-Gas Facility.

Had the off-gas isolation valve, V-7-31, failed to close (isolate) from an off-gas high radiation signal, the main steam line radiation monitor would have simultaneously detected a high radiation condition which would have closed the MSIV's, thereby preventing additional radioactive steam from entering the off-gas system. The MSIV's are designed to close within 3 to 10 seconds.

Corrective Action

The immediate corrective action taken was to remove the defective solenoid valve that prevented the off-gas isolation valve from fully closing. The system functioned satisfactorily with the one remaining solenoid. Within two days of the removal of the defective solenoid valve, a new replacement was installed. No future corrective action is warranted since it was found that the solenoid valve did not, in fact, "fail". Additionally, this valve is tested prior to each startup.

Failure Data

Manufacturer: ASCO
Model Number: 8300B59RF
Size: 1/4"

Note: Valve itself did not fail (foreign material under seat)