



GPU Nuclear

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Writer's Direct Dial Number:

March 23, 1983

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. 50-219/83-10/01T

This letter forwards three copies of a Licensee Event Report (LER) to report Reportable Occurrence No. 50-219/83-10/01T in compliance with paragraph 6.9.2.A.9 of the Technical Specifications.

Very truly yours,

Peter B. Fiedler
Vice President and Director
Oyster Creek

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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 50-219/83-10/01T

Report Date

March 23, 1983

Occurrence Date

March 7, 1983

Identification of Occurrence

Discovery of a design deficiency which resulted in not meeting a Limiting Condition for Operation as defined in the Technical Specifications, paragraph 3.5.B.

This event is considered to be a reportable occurrence as defined in the Technical Specifications, paragraph 6.9.2.A.9.

Conditions Prior to Occurrence

Mode Switch	Refuel
Thermal Power	0 MWt
Generator Load	0 MWe
Reactor Coolant Temperature	<212°F

Description of Occurrence

On Monday, March 7, 1983, the circuit breaker for System II of the Standby Gas Treatment System (SGTS) was "racked out" for system maintenance. Plant operations personnel later recognized a system design deficiency.

When the circuit breaker is "racked out", the control power transformer (connected to the primary side of the circuit breaker) de-energizes. When control power is lost to the solenoid valves, air supply to the diaphragm operated inlet and outlet valves is vented off. Since these diaphragm valves are "air to close" and fail open on a loss of air, this results in the affected system being left unisolated.

If one (1) SGTS is out of service, by "racking out" the circuit breaker, and the remaining system is initiated under an accident condition, some portion of the discharge from the operating system would recirculate through the out of service system as the SGTS trains are situated in parallel and share a common discharge duct.

Apparent Cause of Occurrence

The apparent cause of the occurrence is attributed to the removal of an exhaust fan circuit breaker which unexpectedly removed control power from the inlet and outlet solenoid valves, resulting in the diaphragm valves failing open.

This occurrence is attributed to a design deficiency.

Analysis of Occurrence

The Standby Gas Treatment System is provided to filter Reactor Building atmosphere to the stack in the event of certain accident situations, in order to minimize the release of radioactive materials to the environment.

The SGTS consists of two parallel full-flow systems of filters and fans, capable of maintaining a negative building pressure ($-0.25''$ H₂O) and retaining radioactive iodines and particulates that may be present in the Reactor Building during and after an accident.

For the condition presented in this occurrence, recirculation could possibly reduce the operating system's ability to provide sufficient system flow and sufficient negative pressure in the Reactor Building.

Corrective Action

Immediate corrective action was to place the System II exhaust fan breaker back in service, which closed the inlet and outlet valves, allowing System I to operate independently.

Additional corrective action will be to add precautions and limitations to SGTS related procedures which will maintain operability of the redundant system when one system is removed from service.

Caution tags will be placed on the control switches and circuit breakers to alert the operator of this problem.

The SGTS control circuitry will be reviewed to determine if an improved methodology of maintaining continuous control power to the solenoid valves is practical.