

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Oyster Creek, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 1 9	PAGE (3) 1 OF 0 4
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TITLE (4)
Standby Gas Treatment Systems I and II Simultaneously Inoperable

EVENT DATE (5)			LER NUMBER (8)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
0	5	27	84	011	00	0	6	26			0 5 0 0 0
0	5	27	84	011	00	0	6	26			0 5 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

OPERATING MODE (9) N	20.402(b)	20.406(e)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0 1 0 1 0	20.406(a)(1)(i)	50.38(e)(1)	X 50.73(a)(2)(v)	73.71(e)
	20.406(a)(1)(ii)	50.38(e)(2)	X 50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 368A)
20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)		
20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)		
20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)		

LICENSEE CONTACT FOR THIS LER (12)

NAME Michael H. Allen - Operations Engineer	TELEPHONE NUMBER AREA CODE: 6 1 0 1 9 9 1 7 1 1 - 1 4 1 6 1 1 1
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e. approximately fifteen single space typewritten lines) (16)

Both trains of the Standby Gas Treatment System (SGTS) were rendered inoperable for nine (9) minutes while performing preventive maintenance on a circuit breaker. The maintenance required that the circuit breaker for a Motor Control Center be racked out, which secured power to the emergency exhaust fan and the inlet, outlet and orifice valves of SGTS II. This made SGTS II inoperable. The three (3) valves in the SGTS II failed open due to the loss of power, which permits recirculation flow upon initiation of SGTS I. This caused SGTS I to also be considered inoperable. The event occurred due to Operations management misunderstanding of the extent of the temporary change associated with a plant modification involving the SGTS. A violation of the Technical Specifications resulted, which require that at least one train of the SGTS be operable when secondary containment is required. Both trains of the SGTS were returned to service by installing a spare circuit breaker, as planned, in the switchgear location of the circuit breaker removed for maintenance. A plant modification is in progress which will prevent this problem in the future.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT (if more space is required, use additional NRC Form 388A's) (17)

DATE OF OCCURRENCE

The event occurred on May 27, 1984 at approximately 1720 hours.

IDENTIFICATION OF OCCURRENCE

Both trains of the Standby Gas Treatment System were inoperable at the same time while secondary containment was required, resulting in a violation of the Technical Specifications sections 3.5.B.2 through 3.5.B.4.

This event is considered to be a reportable event as defined in 10 CFR 50.73(a)(2)(i)(B), 10 CFR 50.73(a)(2)(v)(C), and 10 CFR 50.73(a)(2)(vii)(C).

CONDITIONS PRIOR TO OCCURRENCE

The reactor was partially fueled and the mode switch was in REFUEL.

DESCRIPTION OF OCCURRENCE

Annual circuit breaker preventive maintenance had been scheduled for the date of this event. The maintenance required that the circuit breaker supplying power to the 460 volt Motor Control Center (MCC) 1B24 be racked out, resulting in de-energization of MCC 1B24. This Motor Control Center provides power to the emergency exhaust fan and three (3) solenoid valves for System II of the Standby Gas Treatment System (SGTS). De-energization of the System II exhaust fan renders this train of the SGTS inoperable. The three (3) solenoid valves supply air to the diaphragm operated inlet, outlet and orifice valves for the system II exhaust fan. When power is lost to these solenoid valves the air supply to the diaphragm valves is vented off, causing the diaphragm valves to open. Since the SGTS trains are situated in parallel and feed a common discharge duct, some bypass recirculation flow would occur through the open SGTS II valves if SGTS I was initiated. This degrades the ability of SGTS I to perform its intended function.

On-shift control room personnel realized that de-energization of MCC 1B24 would cause SGTS II to be inoperable and brought it to the attention of Operations management. However, as a result of a previous LER, a temporary change had been installed that split the power supplies for the SGTS trains heater coil control relays in conjunction with the initiation of a modification designed to make each SGTS train electrically independent. Operations management misunderstood the extent of the temporary change.

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TEXT (If more space is required, use additional NRC Form 388A's) (17)

Thinking it was identical to the proposed modification, which when completed will allow the de-energization of MCC 1B24 without affecting SGTS train I, Operations management directed the operators to proceed with the evolution. At 1716 hours, SGTS I was tested to verify its operability prior to removing SGTS II from service. An operator was stationed at Panel 11R in the control room to monitor the SGTS. At approximately 1720 hours, the feeder breaker to MCC 1B24 was opened and racked out. The operator at panel 11R noted that the inlet, outlet and orifice valves for the SGTS II Emergency Exhaust Fan opened upon de-energization of MCC 1B24. This information was made available to the Group Shift Supervisor (GSS). The maintenance was allowed to continue and nine (9) minutes later a spare breaker was installed, as planned, in the switchgear location of the feeder breaker removed for maintenance. Power was restored to MCC 1B24, which returned both SGTS trains to service. An operability test was subsequently performed satisfactorily on SGTS II. Realizing that a violation of the Technical Specifications had occurred, the GSS notified his supervisor and submitted a Plant Deviation Report describing the event. Similar maintenance scheduled for the feeder breaker to MCC 1A24 was cancelled.

APPARENT CAUSE OF OCCURRENCE

The apparent cause of occurrence is attributed to the following:

- (a) A design deficiency exists in the control system for the Standby Gas Treatment System, since the inlet, outlet and orifice valves for a particular train open when the exhaust fan for that train is de-energized. This results in both trains being considered inoperable.
- (b) Operations management misunderstood the extent of a temporary change associated with a permanent modification being installed to make SGTS I and SGTS II electrically independent.

ANALYSIS OF OCCURRENCE and SAFETY ASSESSMENT

This event represents a reduction in the ability of the Standby Gas Treatment System to perform its intended function. The system is designed to substantially reduce the off-site dose which might result subsequent to design basis accidents. This is accomplished by:

- (a) Maintaining the Reactor Building at .25 inches water vacuum to prevent ground level release of the building atmosphere;
- (b) Filtering radioactive iodines and particulates (which may be present during and after an accident) from the Reactor Building Air Exhaust;
and

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- (c) Providing for elevated release of the Reactor Building contents to significantly reduce ground level concentrations due to atmospheric dispersion.

With the inlet and outlet valves of the SGTS II exhaust fan open, the effectiveness of SGTS I is degraded. If an event occurred which required initiation of the SGTS in this condition, the bypass recirculation flow discussed previously would result in a reduced ability to maintain a .25 inch water vacuum in the Reactor Building. Maintaining the reactor building at negative pressure is required to prevent a ground level release of radioactive material under accident conditions.

The safety significance of this event is minimal considering the short time (nine (9) minutes) that both SGTS trains were inoperable. Furthermore, conditions at the time of the occurrence were such that a significant release of radioactive material requiring initiation of the SGTS would be highly unlikely. However, had refueling been in progress and a refueling accident occurred, the consequences of the degradation of the SGTS would have been more significant due the potential for airborne radioactivity in the Reactor Building.

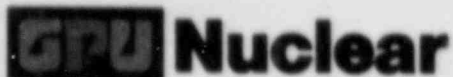
CORRECTIVE ACTION

The immediate corrective action was to install a spare circuit breaker, as planned, in the switchgear location of the feeder breaker removed for maintenance. An operability test was then performed satisfactorily on SGTS II. Future solutions to be implemented include the following:

- (a) Modification of the SGTS control circuitry is in progress. This will eliminate the design deficiency.
- (b) The Operations department will re-evaluate the method used to inform personnel of the status of plant modifications.

SIMILAR OCCURRENCES

Reportable Occurrence No. 50-219/83-10/01T



GPU Nuclear Corporation
Post Office Box 388
Route 9 South
Forked River, New Jersey 08731-0388
609 971-4000
Writer's Direct Dial Number:

June 26, 1984

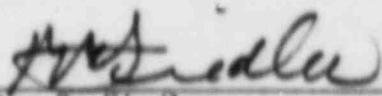
U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report

This letter forwards one (1) copy of Licensee Event Report (LER)
No. 84-011.

Very truly yours,


Peter B. Fiedler
Vice President and Director
Oyster Creek

PBF:dam
Enclosures

cc: Dr. Thomas E. Murley, Administrator
Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

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

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