

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 3			
TITLE (4) Scram Discharge Volume Vent and Drain Valves Exceeded Allowable Closing Time																							
EVENT DATE (5)			LER NUMBER (6)					REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)												
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES						DOCKET NUMBER(S)								
1	0	1	6	8	4	8	4	0	2	2	0	1	1	1	5	8	4	0 5 0 0 0 0					
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)																					
POWER LEVEL (10)		20.402(b)					20.405(a)					50.73(a)(2)(iv)					73.71(b)						
0 1 0 1 0		20.405(a)(1)(i)					50.36(a)(1)					50.73(a)(2)(v)					73.71(a)						
		20.405(a)(1)(ii)					50.36(a)(2)					50.73(a)(2)(vi)					OTHER (Specify in Abstract below and in Text, NRC Form 305A)						
		20.405(a)(1)(iii)					X 50.73(a)(2)(i)					50.73(a)(2)(viii)(A)											
		20.405(a)(1)(iv)					50.73(a)(2)(ii)					50.73(a)(2)(viii)(B)											
		20.405(a)(1)(v)					50.73(a)(2)(iii)					50.73(a)(2)(x)											
LICENSEE CONTACT FOR THIS LER (12)																							
NAME										TELEPHONE NUMBER													
Michael H. Allen, Operations Engineer										AREA CODE		6 0 9 9 7 1 1 - 4 6 1 1											
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																							
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC													
SUPPLEMENTAL REPORT EXPECTED (14)												EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR							
YES (If yes, complete EXPECTED SUBMISSION DATE)												X NO											

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

During performance of a scheduled surveillance, three Scram Discharge Volume vent and drain valves exceeded their maximum allowable closing time. Redundant valves in the vent and drain piping closed within the time required by the Technical Specifications. The on-duty Group Shift Supervisor was notified of this failure and had the valves stroked again. The results were the same as in the first test. Subsequent investigation revealed that the three vent and drain valves did not meet Technical Specification closing time requirements due to an improperly installed diaphragm in a solenoid operated air valve which actuates these valves. The malfunction was corrected by installing the diaphragm correctly. During subsequent post maintenance surveillance testing all vent and drain valves met the Technical Specification closing time requirements.

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			YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

TEXT (If more space is required, use additional NRC Form 366A's) (17)

DATE OF OCCURRENCE

The event occurred on October 16, 1984 at approximately 2040 hours.

IDENTIFICATION OF OCCURRENCE

Three Scram Discharge Volume vent and drain valves exceeded the maximum allowable closing time of thirty (30) seconds specified by Technical Specifications section 4.2.H.a.

This event is considered to be a reportable event as defined in 10 CFR 50.73(a)(2)(i)(b).

CONDITIONS PRIOR TO OCCURRENCE

The reactor was in the refuel mode with reactor coolant less than 212°F.

DESCRIPTION OF OCCURRENCE

On October 16, 1984, a scheduled surveillance was being performed on the Scram Discharge Volume (SDV) system. A portion of the surveillance involved the timing of the SDV vent and drain valves upon insertion of a reactor scram signal. Two vent valves and one drain valve failed to close within the Technical Specification maximum allowable closing time of thirty (30) seconds. These valves did close approximately two minutes after insertion of the scram signal. In accordance with Technical Specifications, all control rods were verified to be inserted and an administrative rod block was initiated. To ensure the validity of the first test, the Group Shift Supervisor (GSS) reset the SDV valves and repeated this portion of the surveillance. The results of the second test were essentially the same as the first test. Subsequent troubleshooting revealed that air was not being properly vented from the operators of the three SDV vent and drain valves. Since the vent path for the SDV valves' operators is through two solenoid operated air valves, these valves were disassembled and inspected. A diaphragm in one of the air valves was found to be installed backwards which caused the air valve to vent at a greatly reduced rate. This in turn caused the time delay in the closure of the three SDV vent and drain valves. The diaphragm was installed in the air valve correctly, and a subsequent re-test of SDV vent and drain valve stroke times was performed satisfactorily.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

APPARENT CAUSE OF OCCURRENCE

The apparent cause of the occurrence is attributed to an improperly installed diaphragm in a solenoid operated air valve. This valve actuates to allow the SDV vent and drain valves to close. The diaphragm is believed to have been installed incorrectly during maintenance conducted on May 9, 1984. Procedural controls and post-maintenance testing performed at that time were inadequate, which caused this problem to remain undetected until the performance of the scheduled surveillance on October 16, 1984.

ANALYSIS OF OCCURRENCE AND SAFETY ASSESSMENT

The scram discharge volume (SDV) vent and drain valves close during a scram to limit the loss of and contain the reactor coolant. At the time of the occurrence, the plant was shutdown and scheduled testing was in progress. The safety significance of this event is minimal, since the scram discharge volume would have been isolated by the other vent and drain valves even in the worst case scenario (i.e., full power operation). This is due to the fact that two valves are located in series for each vent and drain flowpath. Thus, each of the three vent and drain valves which did not close within the maximum allowable time had a backup valve which did close within Technical Specification closing time requirements. The scram discharge volume was effectively isolated within the required time even with the failure of three of the vent and drain valves.

CORRECTIVE ACTION

The immediate corrective action was to properly install the diaphragm in the solenoid operated air valve of concern. A post-maintenance re-test verified proper operation of this valve, since all SDV vent and drain valves close within the allowable closing time required by the Technical Specifications.

Other corrective actions to be implemented include:

- Development of a procedure for maintenance on the solenoid valves in the SDV system.
- GPUN will investigate improved methods for specification of post-maintenance testing.



GPU Nuclear Corporation

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November 15, 1984

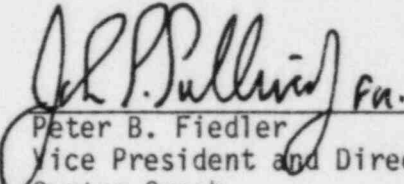
U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

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. 84-022.

Very truly yours,


Peter B. Fiedler
Vice President and Director
Oyster Creek

PBF:dam
Enclosures

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