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

August 17, 1994
C321-94-2137

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

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report 94-011

Enclosed is the Licensee Event Report 94-011.

If there are any questions please contact Mr. John Rogers at 609.971.4893.

John J. Barton
Vice President and Director
Oyster Creek

230022

JJB/JJR
Attachment

cc: Administrator, Region I
Senior Resident Inspector
Oyster Creek NRC Project Manager

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NRC FORM 366A
(5-92)

LICENSEE EVENT REPORT (LER)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Oyster Creek, Unit 1	05000219	1 OF 4

TITLE (4)
Containment Spray/Automatic Depressurization Panels Did Not Meet Seismic Criteria due to Original Design

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 NAME	DOCKET NUMBER
										05000
07	18	94	94	-- 011 --	00	08	17	94	FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
		20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)	
POWER LEVEL (10)	100	20.405(a)(1)(i)		50.36(c)(1)	X	50.73(a)(2)(v)		73.71(c)	
		20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER	
		20.405(a)(1)(iii)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		(Specify in Abstract below and in Text, NRC Form 366A)	
		20.405(a)(1)(iv)	X	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 (Include Area Code)
Sylvain Schwartz	609.971.4558

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)			EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO				

ABSTRACT (16) (Limit to 1400 spaces, i.e., approximately 15 single-spaced lines)

During the course of a Seismic Qualification Utility Group (SQUG) walkdown, it was discovered that the control panels ER 8A and ER 8B housing the control logic for portions of the Automatic Depressurization System and Containment Spray Systems were not restrained sufficiently to ensure operability during a Safe Shutdown Earthquake. The root cause of this condition was the original design.

The safety significance is considered minimal as the probability of occurrence of an SSE in combination with a Loss of Coolant Accident was extremely low. Additionally, approved procedures were in place which would have addressed this concern.

Immediate corrective action was taken to install modified supports for the panels. The SQUG walkdowns are continuing and if any additional corrective actions are identified, they will be evaluated and implemented through the SQUG program.

DATE OF DISCOVERY

The condition described in this report was identified on July 18, 1994.

IDENTIFICATION OF OCCURRENCE

During the course of Seismic Qualification Utility Group (SQUG) walkdowns, it was discovered that the control panels (CFI-PL) ER 8A and ER 8B which house the control logic relays (CFI-RLY) and associated wiring for portions of the Automatic Depressurization and Containment Spray (EIIS-BO)/Emergency Service Water Systems (EIIS-BI) were not adequately restrained. It was determined that during a Safe Shutdown Earthquake (SSE), the control panels would tip in such a way that the operability of the redundant trains of Containment Spray/Emergency Service Water and Automatic Depressurization System could not be ensured. This is considered to be reportable in accordance with 10 CFR 50.73(a)(2)(i), 10 CFR 50.73(a)(2)(ii), and 10 CFR 50.73(a)(2)(v).

CONDITION PRIOR TO DISCOVERY

At the time of discovery, the plant was at approximately full power. This condition has been present throughout the plant's operating history.

DESCRIPTION OF OCCURRENCE

During a plant walkdown for the purpose of evaluating electrical panel seismic acceptability, it was identified that the stresses in the plates holding down the ER 8A and ER 8B panels would have exceeded capacity during an SSE. Therefore, there was no adequate mechanism to transfer seismic loads to the building structure. After an operability determination, the systems controlled through these panels (i.e. Containment Spray/Emergency Service Water and Automatic Depressurization System) were declared inoperable due to the potential for panel tipping. A plant shutdown was initiated in accordance with the appropriate Technical Specification Limiting Conditions for Operation (3.4.B.3, 3.4.C.7, and 3.0.A).

Due to the short period of time necessary to restore the subject panels to seismic acceptability, coupled with the low probability of a Loss of Coolant Accident in combination with an SSE, an exercise of discretion for a period of 48 hours was requested from Region I of the USNRC to allow for the installation of modified supports.

DESCRIPTION OF OCCURRENCE (Cont.)

The exercise of discretion was granted on July 18, 1994 at 8:25 pm. The modification was completed by 4:00 am and the systems were declared operable at 11:00 am when the modification paperwork was completed and approved on July 19, 1994. The request and subsequent exercise of discretion were documented by letter C321-94-2117, Barton to Martin, dated July 19, 1994.

APPARENT CAUSE OF OCCURRENCE

The cause of this condition was the original design.

ANALYSIS OF OCCURRENCE AND SAFETY SIGNIFICANCE

This condition could have had two potential effects on the plant. Firstly, the Automatic Depressurization system could have been made inoperable, thereby removing one of the methods for pressure reduction to allow for low pressure coolant injection during a small break LOCA. Secondly, the Containment Spray could have been rendered inoperable, thereby removing the preferred method for energy removal from the containment (Drywell and Torus) during the long term cooling portion of a large break LOCA.

In a small break LOCA, sufficient time is available for the control room operators to detect and mitigate the accident. System pressure can be reduced through the main condensers or the Isolation Condenser systems. In a large break LOCA, pressure in the vessel drops immediately thereby allowing the low pressure Core Spray system to inject into the vessel. Long term removal of heat from the containment and Torus can be accomplished through other energy flow paths which are specified and detailed in the Emergency Operating Procedures.

This condition is considered to have minimal safety significance for the following reasons:

1. None of the affected systems is required to support a normal safe plant shutdown.

2. The safety significance of this condition is limited to the extremely low probability of a seismic event in combination with a Loss of Coolant Accident.

3. Approved plant procedures were in place to address and mitigate the potential consequences of this highly improbable combination of events.

CORRECTIVE ACTIONS

Reactor operators were briefed on this potential concern. The expected operator response during an SSE was emphasized during these briefings.

Seismic plates were installed to limit control panel motion and the subsequent potential for loss of the Containment Spray/Emergency Service Water and Automatic Depressurization Systems during an SSE. These plates are capable of adequately transferring loads to the building without exceeding allowable seismic stress limits.

The SQUG walkdowns are continuing. Additional corrective actions may be identified. Any additional corrective action will be evaluated and implemented as part of the SQUG process.

SIMILAR EVENTS

LER 85-023 Emergency Service Water System Seismic Concerns
LER 86-014 Containment Spray System Seismic Concerns
LER 86-021 Plant Systems Did Not Meet Seismic Design Bases
LER 94-001 Core Spray Piping Exceeding the Code Allowable Stresses Due to Original Design Deficiency