

**Nuclear**

**GPU Nuclear Corporation**  
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Writer's Direct Dial Number:

June 8, 1990

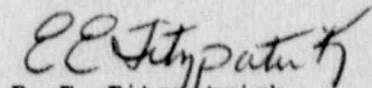
U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

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. 90-006.

Very truly yours,



E. E. Fitzpatrick  
Vice President & Director  
Oyster Creek

EEF:BDe  
(ler/Covltrs:jc)  
Enclosure

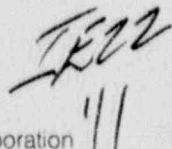
cc: Mr. Thomas Martin, Administrator  
Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Mr. Alexander W. Dromerick  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

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

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S PDC

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## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Oyster Creek, Unit 1										DOCKET NUMBER (2) 0500002119										PAGE (3) 1 OF 04																													
TITLE (4) Operation in Excess of Thermal Power Limit Due to Personnel Error																																																	
EVENT DATE (5) MONTH DAY YEAR 05 11 1990										LER NUMBER (6) YEAR SEQUENTIAL NUMBER REVISION NUMBER 90 - 006 - 00060890										REPORT DATE (7) MONTH DAY YEAR 06 08 90										OTHER FACILITIES INVOLVED (8) FACILITY NAMES DOCKET NUMBER(S) 050000																			
OPERATING MODE (9) POWER LEVEL (10)										THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)																																							
										20.402(b)										20.408(e)										80.73(a)(2)(iv)										73.71(b)									
										20.408(a)(1)(i)										80.36(a)(1)										80.73(a)(2)(v)										73.71(c)									
										20.408(a)(1)(ii)										80.36(a)(2)										80.73(a)(2)(vi)										OTHER (Specify in Abstract below and in Text, NRC Form 306A)									
										20.408(a)(1)(iii)										80.73(a)(2)(i)										80.73(a)(2)(vii)(A)																			
										20.408(a)(1)(iv)										80.73(a)(2)(ii)										80.73(a)(2)(vii)(B)																			
										20.408(a)(1)(v)										80.73(a)(2)(iii)										80.73(a)(2)(x)																			
LICENSEE CONTACT FOR THIS LER (12)																																																	
NAME Paul Cervenka																				TELEPHONE NUMBER AREA CODE 61012 9171 - 4814																													
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)

On May 9 1990, the Group Shift Supervisor and the Shift Technical Advisor removed the Cleanup System losses from the plant heat balance calculation while the Cleanup System was out of service. On May 11, 1990 the Cleanup System was placed back into service without the 7.84 megawatt loss added into the heat balance calculation. For the next nine and one half hours the average power level exceeded the Licensed limit by approximately 1.64 megawatts. The safety significance of this event is minimal as the power level during this event averaged 100.08%. This power level would have a negligible impact on the results of transient or accident analyses. Furthermore, there were ample margins to operating limits for the Critical Power Ratio and Average Planar Linear Heat Generation Rate.

The cause of this occurrence is personnel error. This activity was not controlled by plant procedures and the individuals involved did not ensure adequate controls were established to control the evolution.

Procedure changes will be made to ensure that the computer inputs to the heat balance are adequately controlled.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/86

FACILITY NAME (1)  Oyster Creek, Unit 1	DOCKET NUMBER (2)  05000219	LER NUMBER (3)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		90	006	00	02	OF 04

TEXT (If more space is required, use additional NRC Form 305A's) (17)

Date of Occurrence

The condition was discovered on May 11, 1990 at approximately 2330 hours.

Identification of Occurrence

On May 11, 1990, the plant was operated above the licensed steady state power level of 1930 megawatts thermal, as averaged over an eight hour shift. This condition is prohibited by the Technical Specifications and is reportable in accordance with 10CFR50.73.A.2.i.B.

Conditions Prior to the Occurrence

On May 9, 1990 the plant was operating at full power and preparations were underway to remove the Cleanup System from service for component testing. The Minimum Critical Power Ratio (MCPR) was at 92.8% of its limit. The Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) was at 81.6% of its limit.

Description of Occurrence

On May 9, 1990, at approximately 2235 hours the Cleanup System was taken out of service. The Shift Technical Advisor on duty conferred with the Group Shift Supervisor (GSS) as to whether an adjustment should be made to the heat balance to account for the removal of the Cleanup System (EIIS-CE). The Cleanup System operation requires an adjustment to the heat balance calculation of 7.84 megawatts thermal to account for system losses. When the Cleanup System is out of service 7.84 thermal megawatts can be subtracted from the heat balance calculation. This allows reactor power to be increased by an equivalent amount without exceeding maximum power limitations. After discussion, the GSS concurred with the adjustment, and the Shift Technical Advisor (STA) removed the Cleanup System input to the heat balance on the plant computer (CFI-CPU).

On May 11, 1990, at 1325 hours, reactor power was reduced in anticipation of placing the Cleanup System back into service. At 1400 hours the Cleanup System was placed into service and at 1445 reactor power was returned to near full power. The reactor was operated at or near full power for the next nine and a half hours without the appropriate adjustment (7.84 megawatts) added to the heat balance calculation.



## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED ONS NO 3189-0104

EXPIRES: 0/31/85

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (3)

PAGE (3)

Oyster Creek, Unit 1

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TEXT (4) must appear in triplicate, with reference NRC Form 305a (1) (17)

At 2330 hours, the Shift Technical Advisor on duty (different from the original) recognized that the Cleanup System was not accounted for in the heat balance calculation and immediately informed the GSS. The appropriate adjustment was made to the heat balance and reactor power was reduced accordingly.

The average power level for the nine and a half hours after the Cleanup System was returned to service was approximately 1923.8 megawatts, uncorrected. Corrected this equates to 1931.64 megawatts, which exceeds the license limit of 1930 megawatts.

#### Apparent Cause of Occurrence

The cause of this occurrence is attributed to personnel error while performing an activity not covered by plant procedures. The activity of adjusting the heat balance calculation is not covered by plant procedures. The Group Shift Supervisor and the Shift Technical Advisor discussed the evolution and agreed that it was proper and appropriate to make the adjustment. These individuals failed to ensure that adequate controls were put in place to re-adjust the heat balance calculation prior to placing the Cleanup System back into service. The STA did make a log entry noting the heat balance adjustment, however this in itself did not provide a means to control the evolution. Existing controls such as a temporary procedure change or equipment controls were available; however they were not utilized.

#### Analysis of Occurrence and Safety Assessment

The safety significance of the event is considered minimal as the power level averaged only 100.08% and because of the available margins to the thermal operating limits. Even if the power level averaged 1930 megawatts during the nine and a half hour period, the corrected power level would only be 1937.84 megawatts or 100.4%. The actual average power level over the nine and a half hour period was approximately 1931.64 megawatts (corrected) or 100.08%. The Loss of Coolant Accident (LOCA) analysis is performed assuming 102% of rated power. There was ample margin to the Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) limit (18%). A review of analyzed transient responses, indicates that operation of the reactor at a power level of 1931.64 megawatts would have had virtually no effect on transient response and therefore would not have caused a safety limit to be exceeded. There was added protection due to the 7% margin to the operating limit Critical Power Ratio (CPR).

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/86

FACILITY NAME (1)  Oyster Creek, Unit 1	DOCKET NUMBER (2)  0 5 0 0 0 2 1 9 9 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 3884's) (17)

Corrective Action

Procedure changes will be made to ensure that the computer inputs to the heat balance are adequately controlled.

This Licensee Event Report will be issued as Required Reading for licensed personnel and Shift Technical Advisors. The purpose of the Required Reading is to reinforce that approved methods of equipment control must be utilized when performing activities that are not specifically addressed in plant procedures.