

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) OYSTER CREEK, UNIT J DOCKET NUMBER (2) 0 5 0 0 0 2 1 1 9 1 OF 0 1 3 PAGE (3)

TITLE (4) CASK LIFT WITH UNADJUSTED CRANE VERTICAL LIMIT SWITCHES

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	1										0 5 0 0 0
1	1	0 5 8 4	8 4	0 2 9	0 0	1 2	0 6	8 4			0 5 0 0 0

OPERATING MODE (9) N THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11)

POWER LEVEL (10) 0 0 0	20.402(b)	20.408(a)	90.73(a)(2)(iv)	73.71(b)
	20.408(a)(1)(ii)	90.38(a)(1)	90.73(a)(2)(v)	73.71(a)
	20.408(a)(1)(iii)	90.38(a)(2)	90.73(a)(2)(vi)	
	20.408(a)(1)(iii)	X 90.73(a)(2)(i)	90.73(a)(2)(vii)(A)	OTHER (Specify in Abstract below and in Text, NRC Form 368A)
	20.408(a)(1)(iv)	90.73(a)(2)(ii)	90.73(a)(2)(vii)(B)	
	20.408(a)(1)(v)	90.73(a)(2)(iii)	90.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME RAY MATEER, PLANT ENGINEER TELEPHONE NUMBER 6 0 9 9 7 1 - 4 8 0 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)

YES (if yes, complete EXPECTED SUBMISSION DATE) X NO

EXPECTED SUBMISSION DATE (15)

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

While performing lifting and transporting maneuvers of an empty TN-9 spent fuel shipping cask over the Cask Drop Protection System (CDPS), switches that limit crane hook and load height were not properly adjusted. A toggle switch was installed in series with the two (2) limit switches and was in the open position, thus de-energizing the hoist 'raise' control circuit. With the toggle switch open, the hoist could not be raised. As a result, the load height limit was maintained administratively by the use of a measuring gauge and the toggle switch.

The causes of the event were determined to be lack of detail in the cask handling procedure, inadequate supervision of craft personnel, and inadequate instruction of personnel on Technical Specification requirements relative to cask handling.

0833A

8412200075 841206  
PDR ADOCK 05000219 PDR  
S

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)  OYSTER CREEK, UNIT I	DOCKET NUMBER (2)  0 5 0 0 0 2 1 9 8 4	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		0	29	00	02	OF	03

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

DATE OF OCCURRENCE

The event occurred on November 5, 1984.

IDENTIFICATION OF OCCURRENCE

A TN-9 spent fuel shipping cask was lifted by the 100 ton capacity Reactor Building Crane above the top plate of the Cask Drop Protection System (CDPS) with unadjusted vertical limit switches.

This is prohibited by Technical Specification 5.3.1.E, and is reportable per 10 CFR 50.73 (a)(2)(i)(B).

CONDITIONS PRIOR TO OCCURRENCE

Mode Switch Position: REFUEL  
 Thermal Power: 0 Mwt  
 Generator Load: 0 MWe  
 Reactor Coolant Temp. <212 F

DESCRIPTION OF OCCURRENCE

While performing an initial training lift and movement of a TN-9 spent fuel shipping cask above the top of the CDPS, the two (2) crane vertical limit switches were not properly adjusted and were manually overridden. Technical Specifications require vertical limit switches to be operable during cask movement above the top of the CDPS to limit the height of the cask to no more than 6 inches above the CDPS. A temporary manual toggle switch was installed in series with the two limit switches which are also wired in series. Normally, when the switches are actuated, power to the hoist 'raise' control circuit would be removed when the load approached a height of 6 inches from the top of the CDPS. This occurs via a contact break. By manually opening the circuit with the toggle switch, power to the hoist 'raise' control circuit can also be removed. This is what was done to limit vertical height in lieu of the limit switches. The cask remained below the maximum allowed height of 6 inches above the CDPS by use of a "Go-No-Go" gauge. This was verified by the job supervisor and engineer. As the cask was moved above the CDPS, it was then noticed that the pendant switch was not adjusted within prescribed limits. At this time, the toggle switch was in the open position. The cask was then moved from above the CDPS and lowered onto the Safe Load Path. During a subsequent critique, it was revealed that the rotary switch was not properly adjusted as well.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)  OYSTER CREEK, UNIT I	DOCKET NUMBER (2)  0 5 0 0 0 2 1 9	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8 4	0 2 9	0 0	0 3	OF 0 3

TEXT (If more space is required, use additional NRC Form 385A's) (17)

APPARENT CAUSE OF OCCURRENCE

The apparent cause of this event was a deficient procedure. The TN-9 cask handling procedure was not specific in its description of limit switch adjustment. In addition, the electrician assigned to the job was not properly instructed as to the requirement to adjust both limit switches.

ANALYSIS OF OCCURRENCE AND SAFETY ASSESSMENT

The CDPS is a passive hydraulic dashpot structure located in the Northeast corner of the spent fuel storage pool. Its purpose is to limit the velocity of a free-falling shipping cask, while it is being lowered within the CDPS, to preclude damage to the spent fuel storage pool. When shipping casks are moved above the CDPS, a vertical height limitation of 6 inches has been established. The CDPS structure has been designed to prevent collapse should a 100 ton design basis shipping cask be dropped onto it from the 6 inch height. Redundant and diverse limit switches have been provided to limit cask height above the CDPS. Although both automatic limit switches were not set, the manual toggle switch and gauge block administratively restricted the vertical height of the 40 ton TN-9 cask to less than 6 inches above the CDPS.

CORRECTIVE ACTION

After it was noticed that the pendant limit switch was not set, the cask was removed from above the CDPS and lowered to the refueling floor on the Safe Load Path. A critique was held to discuss all noted deficiencies with the job. Corrective actions were initiated and completed prior to further cask movement. These corrective actions include:

- 1) Identify the availability of Technical Specification information to contractor management.
- 2) Develop and issue procedure changes to properly address limit switch settings.
- 3) Instruct all support electricians assigned to cask handling operations in the procedural requirements and safety significance of their assignment.
- 4) Set limit switches properly in accordance with the changed procedure.
- 5) Clarify contractor responsibility for direct supervision of work.

0833A



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

December 6, 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.84-029.

Very truly yours,

Peter B. Fiedler  
Vice President and Director  
Oyster Creek

PBF:dsm  
Enclosures

cc: Dr. Thomas E. Muriey, 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

IE22  
11