



## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
OYSTER CREEK, UNIT 1	0500021985	—	022	—	0002	OF 04

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

Date of Occurrence

The event occurred on November 20, 1985 at 0853 hours.

Identification of Occurrence

An automatic scram and a manual initiation of the Isolation Condensers occurred as a result of a Main Generator trip.

This event is considered to be reportable as defined in 10CFR50.73(a)(2)(iv).

Conditions Prior to Occurrence

The reactor was in the RUN mode with a thermal power 1486 MWt and generator load of 485 MWe.

Description of Occurrence

On November 20, 1985, at approximately 0853 hours the main generator tripped as a result of a "B" phase differential current relay trip. The generator trip caused a turbine trip which subsequently caused a full reactor scram since turbine load was greater than forty percent (40%) (turbine trip scram low power bypass). A reactor low level scram signal was received due to the rapid level shrink and a scram discharge instrument volume high high-level scram signal was received as expected. Operators reset the scram but shortly thereafter a Main Steam Isolation Valve (MSIV) closure scram occurred. The Isolation Condensers were then utilized to control reactor pressure and initiate a plant cooldown. At approximately 0929 hours, the "A" Isolation Condenser was secured and a feedwater pump was started to raise water level. The cold water addition caused a momentary shrink in level which, combined with an inventory transfer to the isolation condenser, caused a low level scram signal to be received. At approximately 0930 hours, the MSIV valve closure and low reactor water level scrams were reset, and at 1125 hours the MSIVs were opened and the Isolation Condensers secured.

At the time of the occurrence, it was not apparent why the MSIVs closed. Investigation during the post trip review revealed that the Intermediate Range Monitors (IRMs) were being ranged up to range nine, when the main steam isolation signal was received. It was concluded that in ranging up, the operator inadvertently went past range nine to pick up the range ten contacts, which in conjunction with reactor pressure being less than 850 psig, resulted in a MSIV closure. Subsequent testing of the range switch confirmed that range ten contacts will pick up in the nine/ten intermediate position.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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

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

Apparent Cause of Occurrence

The cause of the "B" phase differential current relay trip is attributed to a failure in the secondary windings of a current transformer. Current transformers are utilized to measure the current "into" and "out of" each phase of the main generator. If the current sensed in each phase is not equal, a generator fault condition exists and the generator will be automatically tripped to minimize damage to the unit. The failure of the current transformer caused a current differential to be sensed, even though no fault condition existed, and thus tripped the generator.

Analysis of Occurrence and Safety Assessment

The scram associated with a turbine trip is an anticipatory function; that is, it anticipates the reactor power increase and starts control rod motion before a pressure excursion begins in order to minimize the pressure and neutron flux peaks.

A post trip review of this occurrence was performed which determined that plant response was as expected, with the exception of the MSIV closure. The operators' actions were appropriate and in accordance with procedures, and all equipment and safety functions performed as designed. The safety significance is considered minimal since the plant responded as designed for the conditions that existed.

Corrective Actions

Corrective action consisted of replacing the failed current transformer with a spare unit. The failed unit will be further analyzed to determine the root cause of the failure.

Corrective action for the inadvertent MSIV closure will consist of the following:

1. Training will be given to all licensed operators with regard to this event to preclude over ranging the IRM range switch in the future.
2. Plant Engineering will determine whether a modification should be made to prevent inadvertent actuation of the IRM range ten contacts.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

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

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

Failure Data

Manufacturer: General Electric  
Device: Current Transformer  
Model No: 85H269  
Type: BRY  
Turn Ratio: 20,000/5  
Cause: B  
System: EL  
Component: 86GD  
Manufacturer: G080  
Reportable to NPRDS: No



**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 19, 1985

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. 85-022.

Very truly yours,

Peter B. Fiedler  
Vice President and Director  
Oyster Creek

PBF:KB:dam(0134A)  
Enclosures

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

Mr. Jack N. Donohew, Jr.  
U.S. Nuclear Regulatory Commission  
7920 Norfolk Avenue, Phillips Bldg.  
Bethesda, MD 20014  
Mail Stop No. 314

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