

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Shoreham Nuclear Power Station Unit #1										DOCKET NUMBER (2) 0 5 0 0 0 3 2 2 1 OF 0 3										PAGE (3) 1 OF 0 3			
TITLE (4) CRAC "B" Initiation Signal Received Caused by Low Reactor Building Differential Pressure												OTHER FACILITIES INVOLVED (8)											
EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			FACILITY NAMES			DOCKET NUMBER(S)											
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR															
0	5	1	5	8	7	8	7	0	1	5	0	0	0	6	1	2	8	7	0	5	0	0	0
OPERATING MODE (9) 4			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)										73.71(b)										
POWER LEVEL (10) 0 0 0			20.402(b)			20.406(e)			<input checked="" type="checkbox"/> 80.73(a)(2)(iv)			73.71(c)											
			20.406(a)(1)(i)			80.38(a)(1)			<input type="checkbox"/> 80.73(a)(2)(v)			OTHER (Specify in Abstract below and in Text, NRC Form 365A)											
			20.406(a)(1)(ii)			80.38(a)(2)			<input type="checkbox"/> 80.73(a)(2)(vii)														
			20.406(a)(1)(iii)			80.73(a)(2)(i)			<input type="checkbox"/> 80.73(a)(2)(viii)(A)														
			20.406(a)(1)(iv)			80.73(a)(2)(ii)			<input type="checkbox"/> 80.73(a)(2)(viii)(B)														
			20.406(a)(1)(v)			80.73(a)(2)(iii)			<input type="checkbox"/> 80.73(a)(2)(ix)														
LICENSEE CONTACT FOR THIS LER (12)												TELEPHONE NUMBER											
NAME Robert W. Grunseich, Operational Compliance Engineer												AREA CODE 5 1 1 6											
												9 2 1 9 1 - 1 8 1 3 1 0 0											
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)										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR									
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input type="checkbox"/> NO													

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

On May 15, 1987 at 0848, an unplanned automatic initiation of the Control Room Air Conditioning (CRAC) "B" train occurred due to low reactor building differential pressure. The "A" trains of CRAC and Reactor Building Standby Ventilation System (RBSVS) were previously placed into operation for a planned outage of the "A" Reactor Protection System (RPS) Bus. RBSVS "B" was in "pull to lock". The Plant was in Operational Condition 4 (Cold Shutdown) with all rods inserted into the core - secondary containment was not required. CRAC "B" initiated when both doors between the reactor building and turbine building were opened simultaneously. The interlock on the doors had malfunctioned; consequently, opening both doors allowed the reactor building to momentarily pressurize to the CRAC system initiation set point (0.3 inches water). Due to the failed interlock switch a security officer was stationed in the air lock between the buildings, a maintenance work request was issued to repair the interlock switch. CRAC "B" was left running until the RPS bus outage was complete. Plant Management was notified of the event and the NRC was notified at 1025 per 10CFR50.72.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMS NO 3150-0101  
EXPIRES 8/2/88

FACILITY NAME (1):

DOCKET NUMBER (2):

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PAGE (4):

Shoreham Nuclear Power Station Unit #1

0 6 0 0 0 3 2 2 8 7 - 0 1 5 - 0 0 0 2 OF 0 3

\* If more space is required use additional NRC Form 256a (1/77).

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor

Energy Industry Identification System (EIIS) codes are identified in the text as [xx].

IDENTIFICATION OF THE EVENT

Automatic initiation of an Engineered Safety Feature (ESF); Control Room Air conditioning (CRAC) system [BH] due to low reactor building differential pressure.

Event Date: 5/15/87

Report Date: 6/12/87

CONDITIONS PRIOR TO THE EVENT

Operational Condition 4 (Cold Shutdown)

Mode Switch - Shutdown

RPV Pressure = 0 psig

RPV Temperature = 102 Degrees F

POWER LEVEL - 0

All rods inserted in the core.

DESCRIPTION OF THE EVENT

On May 15, 1987 at 0848, an unplanned automatic initiation of the Control Room Air Conditioning (CRAC) "B" train occurred due to low reactor building differential pressure. The "A" trains of CRAC and Reactor Building Standby Ventilation System (RBSVS) were previously placed into operation for a planned outage of the "A" Reactor Protection System (RPS) Bus. RBSVS "B" was in "pull to lock". The Plant was in Operational Condition 4 (Cold Shutdown) with all rods inserted into the core - secondary containment was not required. CRAC "B" initiated when both doors between the reactor building and turbine building were opened simultaneously. The reactor and turbine buildings are separated by an airlock, this airlock is a hallway, approximately 30 feet long with a door at each end. The doors are equipped with an interlock mechanism which causes one door to lock closed if the other door is opened, door position indicating lights are provided also. The installation is meant to preclude personnel from opening both doors at the same time. The interlock on the



## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMS NO 318C-0104  
EXPIRES 8/21/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)		
		YEAR	SEQUENCE NUMBER	REVISION NUMBER			
Shoreham Nuclear Power Station Unit #1	0600032287	01	15	00	03	OF	03

\* If more space is required use additional NRC Form 204a (1/77).

doors had malfunctioned; consequently, opening both doors allowed the reactor building to momentarily pressurize to the CRAC system initiation set point (0.3 inches water). Due to the failed interlock switch a security officer was stationed in the air lock between the buildings, a maintenance work request was issued to repair the interlock switch. CRAC "B" was left running until the RPS bus outage was complete. Plant Management was notified of the event and the NRC was notified at 1025 per 10CFR50.72.

CAUSE OF THE EVENT

The cause of the event was a failed interlock switch installed on the two doors between the Reactor Building and Turbine Building. Due to the interlock switch malfunctioning, both doors were allowed to open simultaneously. The switch is supposed to cause one door to lock as the other is opened. The coincident openings allowed the Reactor Building to pressurize to the CRAC initiation set point.

ANALYSIS OF THE EVENT

This event resulted in an unplanned automatic initiation of an Engineered Safety Feature (CRAC) and is reportable per 10CFR50.73(a)(2)(iv). There is no safety significance to this event since the actuation signal was generated as designed (Low Reactor Building Differential Pressure) and the system operated as required. Secondary Containment was not required due to the plant being in cold shutdown and no core alterations being performed. Had this event occurred under a more severe set of circumstances (5% power), there would still be no safety significance.

CORRECTIVE ACTIONS

The switch which indicates the other door's position and provides an interlock between the doors has been repaired. In the interim, a security officer was stationed in the air lock between the two buildings to prevent personnel from opening both doors at the same time. CRAC "B" was left running until the end of the RPS Bus outage.

ADDITIONAL INFORMATION

- a. Manufacturer and model number of failed component (s)  
None
- b. LER numbers of previous similar events  
85-011 and 85-016 occurred prior to installation of interlock device.



## LONG ISLAND LIGHTING COMPANY

SHOREHAM NUCLEAR POWER STATION • P.O. BOX 628 • WADING RIVER, NEW YORK 11792

TEL. (516) 929-8300

June 12, 1987

PM-87-158

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

Dear Sir:

In accordance with 10CFR50.73, enclosed is a copy of Shoreham Nuclear Power Station's Licensee Event Report LER 87-015.

Sincerely yours,

William E. Steiger, Jr.  
Plant Manager

WES/pz

Enclosure

cc: William T. Russell, Regional Administrator  
Clay Warren, Senior Resident Inspector  
Institute of Nuclear Power Operations, Records Center  
American Nuclear Insurers

SR.A21.0200

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