

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Shoreham Nuclear Power Station Unit #1 DOCKET NUMBER (2) 05000322 PAGE (3) 1 OF 02

TITLE (4) HPCI Isolation due to High Exhaust Diaphragm Pressure

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)					
0	8	2	2	8	5	8	5	0	3	2	0	5	0	0	0	0
												0	5	0	0	0

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

OPERATING MODE (9) 2	20.402(b)	20.408(c)	Y	80.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 01014	20.408(a)(1)(i)	80.38(c)(1)		80.73(a)(2)(v)	73.71(c)
	20.408(a)(1)(ii)	80.38(c)(2)		80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	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)(viii)	

LICENSEE CONTACT FOR THIS LER (12) NAME Gary G. Rhoads, Operational Compliance Engineer TELEPHONE NUMBER 516 929-8300

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

CAUSE	SYSTEM	COMPONENT	MANUFAC TURER	REPORTABLE TO NRRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC TURER	REPORTABLE TO NRRDS

SUPPLEMENTAL REPORT EXPECTED (14) YES (15) [X] NO [] EXPECTED SUBMISSION DATE (15) MONTH DAY YEAR

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

On August 22, 1985 at 0223, a HPCI Turbine Exhaust Diaphragm High Pressure "B" side signal was initiated and resulted in the outboard isolation of the HPCI system. The plant was in Operational Condition 2 with an RPV pressure of 929 psig. The HPCI system was declared inoperable prior to the occurrence of the event due to startup testing on the HPCI pump. The isolation occurred while an operator was increasing the HPCI turbine speed to achieve a pump discharge pressure of 100 psig above the RPV pressure during a startup test procedure for controller step response. Due to a apparent small leak in the exhaust diaphragm (rupture disk E41*RD-001), a small buildup of water occurred in the instrument pressure sensing lines. The pressure buildup associated with the apparent leak, combined with the head of water, caused the exhaust diaphragm pressure switches to trip which resulted in the closing of the steam supply isolation valves to the turbine. The HPCI turbine tripped and the system was isolated. The test was then terminated. Plant Management was notified of the event and the NRC was notified per 10CFR50.72. The rupture disk was replaced and the pressure switches were recalibrated.

8509250383 850920
PDR ADOCK 05000322
S PDR

IE22
11

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1): Shoreham Nuclear Power Station Unit #1	DOCKET NUMBER (2): 05000322	LER NUMBER (5):			PAGE (3):	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		85	032	00	02	OF

TEXT (if more space is required, use additional NRC Form 200A's) (17)

On August 22, 1985 at 0223, a HPCI Turbine Exhaust Diaphragm High Pressure "B" side signal was initiated and resulted in the outboard isolation of the HPCI system. The plant was in Operational Condition 2 with an RPV pressure of 929 psig. HPCI was declared inoperable prior to the occurrence of the event due to startup testing.

While utilizing the HPCI pump and completing portions of a startup test procedure (per SP 24.202.01) for controller step change response, the operator was increasing the turbine speed to achieve rated flow at a discharge pressure of 100 psig above RPV pressure (which was at 935 psig). The pump was taking suction from the Condensate Storage Tank (CST) and returning water back to the CST via a test line. When the turbine discharge pressure went to 1060 psig, the operator proceeded to open the test return valve (E41*MOV-037) to the CST to decrease the pressure to 1030 psig. While adjusting the valve, a "B" channel HPCI Isolation signal and a HPCI Turbine Exhaust Diaphragm High Pressure "B" side, occurred and initiated the closing of the outboard steam supply isolation valves (E41*MOV-042 and 048) to the turbine, tripping the turbine and isolating the system.

The HPCI exhaust diaphragm high pressure was due to a apparent leaking rupture disk (E41*RD-001) in the turbine exhaust line, which allowed a head of water to develop in the instrument line to the pressure sensing instrument. Although the apparent pressure leak by itself was not enough to activate the exhaust diaphragm pressure switches on the "B" side (E41*PS-025B and 025D, the pressure switch setpoint is 9 psig), the leak combined with the head of water was, resulting in the isolation. The test procedure was terminated, Plant Management was notified and the NRC was notified per 10CFR50.72. There was no safety significance to the event. All plant systems operated as designed. No ECCS systems were challenged or required for the event. The operators carried out all required actions.

To prevent recurrence, two approved Maintenance Work Requests (MWR) were initiated to recalibrate the pressure switches and replace the rupture disk. The turbine exhaust line will be rechecked when the HPCI turbine is operated for surveillance testing.



LONG ISLAND LIGHTING COMPANY

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

TEL. (516) 929-8300

September 20, 1985

PM-85-188

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 Unit 1's Licensee Event Report 85-032.

Sincerely yours,

William E. Steiger, Jr.
Plant Manager

WES/gr

Enclosure

cc: Dr. Thomas E. Murley, Regional Administrator
John Berry, Senior Resident Inspector
Institute of Nuclear Power Operations, Records Center
American Nuclear Insurers

SR.A21.0200

IE22
/