

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Shoreham Nuclear Power Station Unit #1 DOCKET NUMBER (2) 05000322 PAGE (3) 1 OF 04

TITLE (4) Incorrect Sampling of RHR (Residual Heat Removal) Heat Exchanger Service Water

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)
06	14	88	88	010	02	10	19	88			05000322
<p>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 16 CFR § (Check one or more of the following) (11)</p>											

OPERATING MODE (8)	20.402(b)	20.408(a)	80.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 000	20.408(a)(1)(i)	80.38(j)(1)	80.73(a)(2)(v)	73.71(d)
	20.408(a)(1)(ii)	80.38(a)(2)	80.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.408(a)(1)(iii)	X 80.73(a)(2)(i)	80.73(a)(1)(viii)(A)	
	20.408(a)(1)(iv)	80.73(a)(2)(ii)	80.73(a)(2)(viii)(B)	
	20.408(a)(1)(v)	80.73(a)(2)(iii)	80.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12) Robert W. Grunseich, Operational Compliance Engineer TELEPHONE NUMBER 516 929-8300

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 words, i.e., approximately fifteen single space typewritten lines) (16)

As committed to in LER 88-10 Revision 01, this revision is submitted as a supplemental report to provide the results of the A RHR Heat Exchanger leak test. The revised portions are indicated by vertical lines in the right margin.

On 6/14/88 it was discovered that Radiochemistry technicians were taking service water samples at the inlet side of the A RHR Heat Exchanger instead of the outlet side. The plant was in Operational Condition 4 (Cold Shutdown) with the mode switch in Shutdown and all rods inserted in the core. Plant Management was notified of the event and the NRC was notified at 2137 in accordance with License Condition NPF-36, 2.F. The heat exchanger service water samples are normally taken at RMS (Radiation Monitoring System) [IL] panel 1D11-PNL-023A. However, due to the panel being out of service, the technicians were to take samples at the heat exchanger outlet service water drain line. The technicians mistakenly took the inlet service water drain line isolation valves to be the outlet service water drain line isolation valves. The cause of the event is that the inlet service water drain line isolation valves were not labeled, and the technicians failed to follow up and verify the identity of the valves. To prevent recurrence, all Radiochemistry technicians were informed of the event and of the correct sampling point. The heat exchanger service water drain line isolation valves were identified and clearly labeled as appropriate.

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11

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME IS:	POCKET NUMBER IS:	LER NUMBER IS:			PAGE IS:	
		YEAR	SIGNIFICANT NUMBER	INCIDENT NUMBER		
Shoreham Nuclear Power Station Unit #1	0 5 0 0 0 3 2 2	8 8	0 1 0	0 2	0 2	0 4

1. If more space is required use additional NRC Form 204 (11)

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor

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

IDENTIFICATION OF THE EVENT

Incorrect effluent sampling of RHR (Residual Heat Removal) Heat Exchanger service water.

Event Date: 6/14/88

Report Date: 10/19/88

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CONDITIONS PRIOR TO THE EVENT

Operational Condition - 4, Cold Shutdown

Mode Switch - Shutdown

RPV Pressure = 0 psig RPV Temperature = 109 degrees F

POWER LEVEL - 0

DESCRIPTION OF THE EVENT

On 6/14/88 it was discovered that Radiochemistry technicians were taking service water samples at the inlet side of the A RHR Heat Exchanger instead of the outlet side. The normal method for obtaining the service water sample is through RMS (Radiation Monitoring System) [IL] panel 1D11-PNL-023A. However, alternate samples are being taken from a drain line off the heat exchanger (drain line to Salt Water Drain Tank 1G11-TK-190) due to panel 1D11-PNL-023A being out of service. There are drain lines coming off the inlet and the outlet service water sides of the heat exchanger. With the sample panel out of service, Station Procedure SP 74.020.10 provides instructions to open outlet service water drain line isolation valves 1P41*01V-3004A and 3005A, and obtain a sample at the drain line. However, the technicians have mistakenly been opening inlet service water drain line isolation valves 1P41*01V-3002A and 3003A, which were not labeled, and taking samples at the inlet drain line instead of the outlet drain line.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	LOCAL NUMBER (2)	LER NUMBER (3)			PAGE (4)	
		YEAR	EVENT NO. NUMBER	PLANT NUMBER		
Shoreham Nuclear Power Station Unit #1	0 5 0 0 0 3 2 2	8 8	0 1 0	0 2	0 3	of 0 4

LER is more than a Nuclear Unit address. NRC Form 212 (11/77)

The sampling error was discovered when one of the valves that the technicians were operating needed repair. The Watch Engineer asked the technician to describe the valve that needed repair so that the work instructions could be written. Through discussion with the technician, the Watch Engineer realized that the technicians were taking service water samples at the inlet drain line instead of the outlet drain line.

CAUSE OF THE EVENT

The root cause of the event is that the inlet service water drain line isolation valves were not labeled, and the technicians failed to follow up and verify the identity of the valves. The technicians mistakenly took the inlet service water drain line valves to be the outlet service water drain line valves. This caused them to take samples at the inlet drain line instead of the outlet drain line. The inlet and outlet service water drain lines run adjacent and parallel to each other. The outlet drain line valves are located directly behind the inlet drain line valves. The outlet drain line valves were properly tagged with their identification numbers, but the inlet drain line valves were not tagged.

ANALYSIS OF THE EVENT

This event resulted in a violation of Technical Specifications 4.11.1.1.1 and 3.3.7.10 Action b. Technical Specification 3.3.7.10 Action b states that with panel 1D11*PNL-023A inoperable, effluent releases via the associated pathway may continue for up to 30 days, provided that at least once per 12 hours, grab samples are collected and analysed. Technical Specification 4.11.1.1.1 requires a daily sample of RHR Heat Exchanger service water outlet with a weekly, monthly and quarterly composite analysis. Both these technical specifications were violated due to the erroneous sampling.

An analysis of the safety impact of the erroneous sampling was performed. In order for any release to the environment to occur, there would have to be a leak path from the shell side (Residual Heat Removal System [BO] side) to the tube side (Service Water System [BI] side) of the heat exchanger.

As stated in LER 88-010 Revision 01, a review of the heat exchanger work history verified that no leaks were present prior to and up to a leak test completed 4/87. As committed to in LER 88-010 Revision 01, another leak test was performed 10/3/88 in accordance with Maintenance Work Request (MWR) 88-2154 to determine if any leaks developed subsequent to 4/87. The purpose of this revision is to provide the results of that test as follows.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Facility Name:	Event Number:	LER Number:			Page:	
		Year	Event No.	Page No.	Of	Of
Shoreham Nuclear Power Station Unit #1	05000322	88	010	02	01	04

LER if not used a number use reference to: Apr 88 (11)

The leak test of 10/3/88 verified that no leaks are present. The tube side of the heat exchanger was thoroughly drained and the shell side was pressurized with water to 320-330 psig. This simulated the normal differential pressure which is across the heat exchanger during operation. The pressure was held for one hour. The test was performed with the heat exchanger bottom head removed allowing easy visual inspection of the tubes during the leak test. The test verified that there are no leaks from the shell side to the tube side of the heat exchanger.

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There was no safety significance to the event. The heat exchanger leak tests have verified that there were no releases to the environment. All data previously reported in the Semiannual Effluent Release Reports is unaffected by this event.

CORRECTIVE ACTIONS

The inlet RHR A Heat Exchanger service water drain line isolation valves (1P41*01V-3002A and 3003A) were tagged.

All Radiochemistry technicians were informed of the event and were informed of the correct sampling point.

All other technical specification grab sample locations required for effluent monitoring were verified to be labeled. It was verified that the correct sampling points were being used.

ADDITIONAL INFORMATION

a. Manufacturer and model number of failed component (s)

None

b. LER numbers of previous similar events

None



LONG ISLAND LIGHTING COMPANY

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

TEL. (516) 929-8300

October 19, 1988

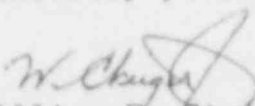
PM-88-228

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

Dear Sir:

Enclosed is Shoreham Nuclear Power Station's Licensee Event Report LER 88-010 Revision 02. As committed to in LER 88-010 Revision 01 submitted 9/28/88, this revision is submitted as a supplemental report to provide the results of the A RHR Heat Exchanger leak test. The leak test was performed 10/3/88. The revised portions of the enclosed report are indicated with vertical lines in the right margin.

Sincerely yours,


William E. Steiger, Jr.
Plant Manager

JJM/jp

Enclosure

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

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IE22
11