NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO 3150-0104
EXPIRES 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Shoreham Nuclear Power Station Unit #1	0 5 0 0 0 3 2 2	1 OF 0 4

TITLE (4) Noble gas samples required by Action Statement 120 of Tech. Spec. 3.3.7.11 were discarded prior to being analyzed for gross activity due to personnel error

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 5 0 0 0
0 6	1 1	8 6	8 6	0 2 5	0 0	0 7	0 9	8 6		0 5 0 0 0

OPERATING MODE (9)	4
POWER LEVEL (10)	0 0 0

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

	20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)
	20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)
	20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)		OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		
	20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)		
	20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Robert W. Grunseich, Operational Compliance Engineer	AREA CODE 5 1 6 9 2 9 - 8 3 0 0

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
	YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO			

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

Out of a series of approximately 30 samples taken over 2 planned station vent outages, on June 11, 1986 at 1625, it was discovered by a Radiochemistry technician that two noble gas grab samples required by Action Statement 120 of Technical Specification Section 3.3.7.11 were dis arded prior to being analyzed The Station Ventilation Exhaust System was tagged out of service for maintenance requiring that grab samples for noble gas be taken every 8 hours and analyzed for gross activity within 24 hours. The plant was in Operational Condition 4 (Cold Shutdown) with the mode switch in shutdown and all rods inserted in the core. Radiochemistry technicians were required to take grab samples from the Reactor Building Secondary (elev. 175' and 40') to meet the requirements of Action Statement 120. Grab samples were taken in the Reactor Building at 1320 and 1325. The samples were collected in two Marinelli beakers and were placed on a cart in the Chemistry Lab awaiting analysis. The technician who was preparing the beakers for the next sample to be taken, unaware that the samples had yet to be counted, filled the beakers up with distilled water, emptying the beaker of the gas samples. At 1625, another technician came in and noticed that the two beakers that contained the gas samples for the reactor building were filled with water. He notified the foreman who dispatched a technician to retake samples in the Reactor Building.

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Plant Management was notified of the event and the NRC was notified per 10CFR50.72. A more efficient means of distinguishing between counted samples and samples required to be counted, will be developed by the Radiochemistry section.

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

Two grab samples for noble gas required by Action statement 120 of Technical Specification section 3.3.7.11 were discarded prior to being analyzed.

CONDITIONS PRIOR TO THE EVENT

Operational Condition 4 (Cold Shutdown)

Mode Switch - Shutdown

RPV Pressure = 0 psig RPV Temperature = 103 degrees F

All rods inserted in the core

DESCRIPTION OF THE EVENT

Out of a series of approximately 30 samples taken over 2 planned station vent outages, on June 11, 1986 at 1625, it was discovered by a Radiochemistry technician that two gas grab samples required by Action Statement 120 of Technical Specification Section 3.3.7.11 were discarded prior to being analyzed. The Station Ventilation Exhaust System [VL] was tagged out of service for maintenance requiring that grab samples for noble gas be taken every 8 hours and analyzed for gross activity within 24 hours.

Radiochemistry technicians were required to take grab samples from five locations in the plant (two in the Turbine Bldg. elev. 15', one in the Chemistry Lab, elev. 44' and two in the Reactor Building Secondary, elev. 175' and 40') to meet the requirements of Action Statement 120. Grab samples were taken in the Reactor Building at 1320 and 1325. The samples were collected in two Marinelli beakers and were placed on a cart in the Chemistry Lab awaiting analysis.

The technician who was preparing the beakers for the next sample to be taken, unaware that the samples had yet to be counted, filled the beakers up with distilled water, emptying the beaker of the noble gas samples. At 1625, another technician came in and noticed that the two beakers that contained the samples for noble gas for the reactor building were filled with water. He notified the foreman who dispatched a technician to retake samples in the Reactor Building. Plant Management was notified of the event and the NRC was notified per 10CFR50.72.

CAUSE OF THE EVENT

The root cause of the event was personnel error, because the technician did not verify that the samples were analyzed prior to discarding them. When the grab samples are obtained in the Maranelli beakers, they are placed on a cart and wheeled into the counting room. The samples are counted and then the cart is moved to the Lab room (in an adjacent room), where they are prepared for the next sampling. However, in this instance, after the Turbine Building samples were counted, the cart was then wheeled into the Lab room. The Technician in the Lab room assumed that all samples were counted and was preparing the beakers for the next sampling, filling them with distilled water. There was nothing to distinguish the samples that were counted and samples that were not counted. In addition, there is no procedure tha indicates where to put the samples prior to and after they are counted. The technicians involved in the incident are adequately qualified to perform their required tasks.

ANALYSIS OF THE EVENT

This event resulted in the violation of Technical Specification Section 3.3.7.11. The Station Ventilation Exhaust System was tagged out of service for maintenance requiring that grab samples for noble gas be taken every 8 hours and analyzed for gross activity per Action statement 120. Although the gas samples were taken at 1320 and 1325 (previously taken at 0720 and 0725), they were discarded prior to being analyzed. When the samples were retaken at 1700, this left a gap of 9 hours and 45 minutes between samples. Instead of the prescribed 8 hours.

There is minimal safety significance to the event. Radiation monitors are located throughout the Reactor Building and would have detected any abnormal activity. Had the event occurred under a more severe set of circumstances (5% power) the safety significance would still be minimal.

CORRECTIVE ACTIONS

To prevent recurrence, the following actions will or have been taken;

1) Instructions were given to all Radiochemistry technicians to obtain the foreman's approval prior to the disposal of samples.

2) A more efficient means of distinguishing between counted samples and samples required to be counted, will be developed by the Radiochemistry section.

3) This LER will become required reading for all radiochemistry technicians.

4) SP 71.018.03 has been drafted by Radiochemistry to preclude similar events from occurring due to shift turnover.

ADDITIONAL INFORMATION

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

NONE

b. LER numbers of previous similar events

NONE

LILCO
LONG ISLAND LIGHTING

LONG ISLAND LIGHTING COMPANY

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TEL. (516) 929-8300

July 9, 1986 PM-86-187

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

Dear Sir:

In accordance with 10CFR50.73, enclosed are copies of Shoreham Nuclear Power Station Unit 1's Licensee Event Report 86-025.

Sincerely yours,

William E. Steiger, Jr.
Plant Manager

WES/mr

Enclosure

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

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