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) Seismic Monitoring Instrumentation in Control Building Inoperable for more than 30 days.

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 6	0 8	8 8	8 8	— 0 0 8	— 0 0	0 7	0 7	8 8		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	4	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 0 0	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)

On 6/8/88 at approximately 1130, Instrumentation & Controls (I&C) technicians found three seismic recorders (1Z94-ZR005 CX, CY and CZ) located on Elevation 44 ft. of the Control Building disabled. The indicators in the recorders were found dampened with foam padding, rendering the recorders inoperable. The plant was in Operational Condition 4 (Clod 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 on 6/8/88 at 1651 per License Condition NPF-36, 2.F. It was not readily apparent how long the recorders had been inoperable. An investigation was conducted in an attempt to determine when the padding may have been inadvertently left in the recorders. Based on our investigation, it is believed that the padding was placed in the recorders on 4/2/87 to prevent damage and spurious operation during demolition work. The root cause of the event is believed to be personnel error. Our investigation indicates that on 4/2/87 when personnel were assigned to disable recorders on Elevation 25 ft. of the Control Building, they also disabled the subject recorders on Elevation 44 ft. but never added the subject recorders to the work document. Therefore, when it came time to restore operability to the Elevation 25 ft. recorders, the padding in the subject recorders on Elevation 44 ft. was never removed since the subject recorders did not appear on the work document as having been disabled. To prevent recurrence, this event will be incorporated into the continuing training program for all I&C personnel.

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

Seismic Monitoring System [IN] instrumentation inoperable for more than 30 days. Failure to meet reporting requirement of Technical Specification 3.3.7.2 Action a.

Event Date: 6/8/88

Report Date: 7/1/88

CONDITIONS PRIOR TO THE EVENT

Operational Condition - 4, Cold Shutdown

Mode Switch - Shutdown

RPV Pressure = 0 psig RPV Temperature = 107 Degrees F

POWER LEVEL - 0

DESCRIPTION OF THE EVENT

On 6/8/88, Instrumentation & Controls (I&C) technicians were assigned to disable seismic recorders on Elevations 25 ft. and Elevation 44 ft. of the Control Building. The recorders were to be disabled to prevent damage and spurious operation during soil compacting work scheduled to begin that day outside near the Control Building. The recorders are Engdahl Enterprises Response Spectrum Recorders, Model RSR 1600 - H/V. The scratch plates (record plates) were to be removed and the indicators dampened with foam padding.

The technicians first disabled the three recorders located on Elevation 25 ft. (recorders 1Z94-ZR005 AX, AY and AZ). The scratch plates were removed and the indicators were dampened with foam padding. The technicians then proceeded to disable the three recorders on Elevation 44 ft. (recorders 1Z94-ZR005 CX, CY and CZ). They found that the indicators had already been dampened with foam padding, rendering the recorders inoperable. The scratch plates were still in place.

To determine how long the recorders were inoperable, their work history was reviewed in an attempt to identify when the foam padding may have been inadvertently left in the recorders. Foam padding has commonly been used in the past to protect the recorders and prevent spurious operation during periods of heavy work causing vibration in the area. Foam padding is also sometimes used to prevent damage when transporting the recorders to and from the shop for calibration. The review revealed no documentation of past work activities which could positively show that foam padding was ever installed in the recorders without having been subsequently removed. However, on 4/2/87, work instructions (MWR 87-1523) were written to disable the recorders on Elevation 25 ft. (recorders 1Z94-ZR005 AX, AY and AZ) to avoid damage during demolition work. Documentation shows that foam padding was installed, subsequently removed, and that new scratch plates were installed for the recorders on Elevation 25 ft. Although the documentation shows that only the recorders on Elevation 25 ft. were disabled, it does not seem reasonable that the recorders on Elevation 44 ft. would not also be disabled, since they would also be affected by the demolition work. This suspicion prompted I&C management to contact the technician who was assigned to disable the recorders on Elevation 25 ft. The technician is no longer with the company but was contacted at her present place of employment.

Discussion with the technician indicates that she recalled disabling the recorders on both elevations (25 ft. and 44 ft.). The supervisor of the technician was also contacted but could not recall details of the work performed. The supervisor is also no longer with the company but was contacted at his present place of employment. It is believed that the recorders on both elevations were disabled 4/2/87, and that the recorders on Elevation 44 ft. (1Z94-ZR005 CX, CY and CZ) were inadvertently never added to the work document (MWR 87-1523) as having been disabled. When it came time to restore operability to the recorders, a different technician was assigend the task, since the original technician had resigned from the company. Therefore, not being aware that the recorders on Elevation 44 ft. were also disabled with foam padding, only the recorders on Elevation 25 ft. were restored to operable status per the work document (MWR 87-1523).

CAUSE OF THE EVENT

The root cause of the event is believed to be personnel error. Our investigation indicates that there was a failure to strictly follow the issued work document (MWR 87-1523). Although disabling the recorders on Control Building Elevation 44 ft. as well as the Elevation 25 ft. recorders was necessary to prevent damage and spurious operation, the work document should have been changed to include the Elevation 44 ft. recorders prior to performing the work.

ANALYSIS OF THE EVENT

This event is a violation of the reporting requirements specified in Technical Specification 3.3.7.2 Action a and is reportable under 10CFR 73 (a) (2) (i). Tech Specs require a Special Report to be submitted within 10 days following 30 days of seismic monitoring instrumentation inoperability. As discussed above this reporting requirement was not met.

Based on our investigation, it is believed that the recorders on Elevation 44 ft. of the Control Building (recorders 1Z94-ZR005 CX, CY and CZ) were inoperable since 4/2/87. Although it can not be positively determined how long the recorders were inoperable, a maximum duration of inoperability can be determined. The three recorders (1Z94-ZR005 CX, CY and CZ) were last calibrated 1/26/87, 1/21/87 and 1/27/87 respectively, in accordance with Technical Specification Surveillance (18 month frequency) 4.3.7.2.1, Table 4.3.7.2-1, 4.C. Therefore, at most, the recorders were inoperable from some time after 1/26/87, 1/21/87 and 1/27/87 until the present.

There was minimal safety significance to the event. All other seismic instrumentation identified in Technical Specification Table 3.3.7.2-1 was unaffected by the inoperability of the 3 subject recorders. The 3 subject recorders are passive devices and do not serve to provide indication of a seismic event to the control room. Therefore, their inoperability had no effect on the ability to detect a seismic event. The subject recorders serve to provide data for analysis following a seismic event.

Other Control Building, Reactor Building and free field seismic instrumentation identified in Technical Specification Table 3.3.7.2-1 was operable to provide data for analysis and to provide control room indication had a seismic event occurred during the time the subject recorders were inadvertently disabled.

CORRECTIVE ACTIONS

This event will be incorporated into the continuing training program for all Instrumentation & Controls (I&C) personnel.

ADDITIONAL INFORMATION

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

None

b. LER numbers of previous similar events

None