NRC FORM 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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) RWCU Isolation Due to Inadequate Procedure When Performing Calibration of 24 VDC Power Supply

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 1	2 9	9 0	9 0	- 0 0 3	- 0 0						0 5 0 0 0
											0 5 0 0 0

OPERATING MODE (9)	*	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)					
POWER LEVEL (10)	0 1 0 0	20.402(b)	20.405(c)	X	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)	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
George D. Schnaars, 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 January 29, 1990 at 1125 hours, an unplanned actuation of the Engineered Safety Feature Primary Containment Isolation System occurred. This event occurred during the calibration of a 24 VDC power supply in the Reactor Water Cleanup (RWCU) Leakage Detection circuitry. The Technician lifted leads to deenergize the power supply which also deenergized the RWCU Leak Detection Ambient Temperature Switches 1G33*TS-071 B, D and F. When the leads were reconnected a high temperature trip occurred which caused the RWCU containment isolation valve 1G33*MOV-034 to close. The work was stopped and the isolation was reset. The RWCU system was restored to its normal lineup and plant management was informed. This event is reportable per 10CFR50.72(b)(2)(ii) and the NRC was notified at 1414 hours. The cause of this event was inadequate procedural guidance. Corrective actions include modifying the Preventive Maintenance Worksheet to specify which leads to remove to deenergize the power supply and also adding a precaution to the power supply calibration procedure.

* Reactor Defueled

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Shoreham Nuclear Power Station Unit 1	0 5 0 0 0 3 2 2	9 0	- 0 0 3	- 0 0	0 2 OF 0 4

TEXT (If more space is required, use additional NRC Form 366A's) (17)

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

Unplanned isolation of the Reactor Water Cleanup System [CE] occurred during performance of an I&C preventive maintenance task.

Event Date: 1/29/90

Report Date: 2/23/90

CONDITIONS PRIOR TO THE EVENT

Reactor Defueled - All fuel assemblies stored in the Spent Fuel Pool

Mode Switch - Shutdown

RPV Pressure = 0 psig RPV Temperature = 88 Degrees F

POWER LEVEL - 0

DESCRIPTION OF THE EVENT

On January 29, 1990 preventive maintenance activity 1G33*410 E/S-800B-4001 was being performed. This is a calibration of the 24 VDC power supply in the Reactor Water Cleanup (RWCU) Leakage Detection circuitry. It is performed per Station Procedure 46.007.02, 24 VDC Power Supply Functional Test. The Technician lifted 2 leads to deenergize and unload the power supply; one of these leads also deenergized 1G33*TS-071 B, D, and F (RWCU Leak Detection Ambient Temperature Switches). The no-load portion of the power supply calibration was completed satisfactorily. He reconnected the lifted leads at 1125 hours. This caused the three temperature switches to reenergize, resulting in a high temperature trip and closing of the RWCU containment isolation valve 1G33*MOV-034. This unplanned actuation of the Engineered Safety Feature Primary Containment Isolation System [JM] is reportable per 10CFR50.72(b)(2)(ii). The work was stopped, the isolation was reset and the RWCU System was restored to its normal lineup. Plant management was notified of this event. The NRC was notified at 1414 hours.

CAUSE OF THE EVENT

This event was caused by inadequate procedural guidance. The Preventive Maintenance Scheduled Activity Worksheet (PM SAWS) contained insufficient instructions for preventing a RWCU isolation by requiring three circuit cards be removed prior to deenergizing the power supply. Also the PM SAWS did not specifically identify which leads had to be removed to deenergize the 24 VDC power supply.

When the two leads were lifted, the 24 VDC power supply and temperature switches 1G33*TS-071 B, D and F were deenergized. The design of these temperature switches is such that when they are initially energized they go full scale high and then settle back to whatever is input from their associated temperature elements. When the leads were reconnected they reenergized the temperature switches which caused a high temperature trip and initiated a close signal to the containment isolation valve 1G33*MOV-034.

ANALYSIS OF THE EVENT

There was no safety significance to this event. The plant is shutdown and has been defueled since August of 1989. The operators reset the RWCU isolation and restored the system to its normal lineup.

CORRECTIVE ACTIONS

1. The PM SAWS for the 24 VDC power supply will be revised so that it states which leads are to be removed to deenergize only the power supply.

2. SP 46.007.02, 24 VDC Power Supply Functional Test, will have a precaution added that requires the Technician to contact a supervisor if he is uncertain of which leads to be removed.

3. This event will be reviewed by all I&C personnel.

4. This event will be documented on the Equipment History Card for the 24 VDC power supply to inform other Technicians about the potential for causing a RWCU isolation.

ADDITIONAL INFORMATION

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

N/A

b. LER numbers of previous similar events

86-035