Nuclear

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October 13, 1989

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

Dear Sir

Subject: Oyster Creek Nuclear Generating Station
Docket No. 50-219
Licensee Event Report

This letter forwards one (1) copy of Licensee Event Report (LER) No. 89-020.

Very truly yours,

E.E. Fitzpatrick
Vice President & Director
Oyster Creek

EEF/BDEM:jc
Enclosure

cc: Mr. William T. Russell
Region I
U.S. Nuclear Regulatory Commission
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King of Prussia, PA 19406

Mr. Alexander W. Dromerick
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Washington, DC 20555

NRC Resident Inspector
Oyster Creek Nuclear Generating Station

IE22
1/1

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Oyster Creek Unit 1	0 5 0 0 0 2 1 1 9	1 OF 0 4

TITLE (4) DC Control Power Selector Switch for AC Switchgear Selected to Non-Safety Related DC Subsystem Due to Procedural Inadequacy

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 9	1 6	8 9	8 9	0 2 0	0 0	1 0	1 3	8 9		0 5 0 0 0

OPERATING MODE (9)	N	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)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	X 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
M. Godknecht, Plant Engineering	AREA CODE 6 0 9 9 7 1 - 4 1 8 9

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 September 15, 1989, an operator trainee identified that the knife switch used to select the DC control power source for 480V AC Unit Substation (USS) 1B2 was selected to the non-safety related source. Investigations have revealed that the DC control power selector switch for USS 1B2 had been in the wrong position since November of 1986. The cause of this occurrence is attributed to procedural inadequacy. The system was returned to normal after plant modifications using the component lineup sheet in the system operating procedure. This lineup sheet did not include the DC control power selector switches for the 4160V AC or the 480V AC buses and it was not recognized that the switch for USS 1B2 had been left in the wrong position. Changes have been made to the component lineup sheets in the system operating procedure to include the control power selector switches for all of the 4160V and 480V AC switchgear units. This event report will be made required reading for all licensed and equipment operators.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Oyster Creek, Unit 1	0 5 0 0 0 2 1 9	8 9	— 0 2 0	— 0 0	0 2 OF 0 4

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

DATE OF DETERMINATION

The condition described within this report was determined reportable on September 16, 1989.

IDENTIFICATION OF OCCURRENCE

An operator trainee identified that the knife switch used to line-up 125V DC control power for 480V AC Unit Substation (USS) 1B2 (EIIS ED-SWGR) was in the wrong position. The switch should have been lined-up to supply power from the safety related "B" DC Distribution System (EIIS EJ). Instead the switch was lined up to the non-safety related "A" DC Distribution System (EIIS EI). This event is considered reportable under 10CFR50.73(a)(2)(ii)(B).

CONDITIONS PRIOR TO DETERMINATION

The plant was shutdown, the reactor pressure vessel was vented and the reactor coolant temperature was 175°F when the condition was discovered. The plant has been in various operating modes with this condition present.

DESCRIPTION OF OCCURRENCE

On September 15, 1989, a control room operator trainee identified that the knife switch used to select the DC control power source for USS 1B2 was selected to the non-safety related power supply source. On September 16, 1989, system checks were initiated to confirm that the switch was in fact in the wrong position and that a labeling problem did not exist. It was determined that the switch was selected to the wrong power source and corrective action was taken to position the switch to the safety related DC power source. Investigations have shown that the DC control power selector switch for USS 1B2 had been in the wrong position since November of 1986.

It is believed that this condition may have been identified prior to September 15, 1989. A separate investigation is being conducted to ascertain if this is true, and if so, why corrective actions were not taken at that time.

APPARENT CAUSE OF OCCURRENCE

The cause of this occurrence is attributed to procedural inadequacy; however, there is an on-going investigation in progress to determine any other significant contributors to the problem. The DC selector switch for USS 1B2 was repositioned to the non-safety related DC system during the 11R outage to allow Appendix R modifications to be performed on the supply cable from the safety related DC system. After testing to ensure that the modification worked properly, the switch was left in the non-safety related position. When the tagout for the system was cleared, the control power selector switch was left in the non-safety related position. It cannot be definitively determined why the switch was not returned to the safety related position; however, the lineup sheet in the procedure did not include the DC control power selector switches for the 4160V AC or the 480V AC buses and these selector switches are not regularly checked as part of any operator tours or inspections.

ANALYSIS OF OCCURRENCE AND SAFETY SIGNIFICANCE

The 125V DC System provides a continuous, highly reliable source of power for vital control functions and selected component operation. Three distribution subsystems, A, B and C, are used to supply power to the various loads powered by the system. Distribution subsystems B and C are designated as the safety related DC substations and meet 1E requirements. The A DC subsystem is not 1E qualified. This subsystem is used to provide power to non-safety related loads and acts, through manual and automatic transfer switches, as a backup power source to certain safety related loads powered from the B DC subsystem. One of the safety related loads backed up by the A DC subsystem is the breaker control power for the B Division AC switchgear. This backup is provided through a manual transfer switch located in the AC switchgear itself. If the transfer switch is positioned to the A DC subsystem, no loss of breaker control functioning would be experienced during normal plant conditions. However, during design basis seismic event accident conditions, failure of the A DC subsystem could occur and control power to the AC switchgear would be lost.

This event is considered to have minimal safety significance. If a loss of control power to USS 1B2 was experienced as a result of a loss of the A DC subsystem, several safety related loads powered from USS 1B2 would be disabled. However, because of the load redundancy between Division A and B, USS 1A2 has duplicate loads which are by themselves capable of placing and maintaining the plant in a safe shutdown condition. In the situation where the emergency diesel generator for the Division A equipment is not available, the safety related equipment on USS 1B2 could still be operated through local manual breaker operation or by changing the DC control power selector switch to the correct, B DC subsystem position.

CORRECTIVE ACTION

Short Term

1. When it was determined that the switch was selected to the wrong power source, corrective action was taken to position the switch to the safety related DC power source. The DC control power selector switches for all of the 4160V and 480V AC buses were verified to be in the correct positions.

2. A change was made to the system component lineup sheets in the 125V DC operating procedure to include the control power selector switches for all 4160V and 480V AC switchgear.

(Corrective Actions cont'd)

Long Term

1. An investigation has been initiated to determine if the mispositioning of the DC control power selector switch for USS 1B2 had previously been identified, and what if any action was taken as a result of that identification.

2. An on-going investigation is in progress to determine if any other significant contributors to the event can be identified.

3. This event report will be made required reading for all licensed and equipment operators.

SIMILAR EVENTS

LER 88-19: "Tech Spec Violation A&B Condensors being inoperable due to mechanical problems and procedural inadequacies.