NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Indian Point 3	05000286	1 OF 4

TITLE (4) Automatic Actuation of Undervoltage Logic Designed to Strip Safety Buses and Initiate Signal for Emergency Diesel Generator Start

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 NAME	DOCKET NUMBER
01	21	96	96	-- 003 --	00	02	20	96		05000
									FACILITY NAME	DOCKET NUMBER 05000

OPERATING MODE (9)	N
POWER LEVEL (10)	000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (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	
20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)	
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)		

NAME	TELEPHONE NUMBER (Include Area Code)
C. Elwood, Operations Technical Specialist	(914) 736-8349

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).	✓ NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

At 1600 hours on January 21, 1996, with the plant at cold shutdown, an unplanned engineered safeguards logic was actuated. The actuation occurred because a Nuclear Plant Operator accidently dislodged a fuse which caused the breaker from the 6.9 kV bus to safety related 480 volt bus 2A (safety related bus 3A was intertied at the time) to open. The 480 volt undervoltage protection relay actuated the engineered safety feature logic designed to isolate the safety related bus and initiate a start signal to emergency diesel generator (EDG) 31. EDG 31 was out of service at the time. Offsite power was not lost to safety related 480 volt buses 5A and 6A and power was restored to buses 2A and 3A at about 1655 hours. Corrective action was taken by counseling of the Nuclear Plant Operator. Additional corrective action will train nuclear plant operators on the lessons learned from this event. There was no significant affect on public health and safety.

DESCRIPTION OF EVENT

On January 21, 1996, at 1600 hours, with the plant in the cold shutdown condition (reactor coolant temperature at 155 degrees Fahrenheit, reactor coolant pressure at 265 psig and the pressurizer level at 28%), station service transformer (SST) (XCT) breaker (BKR) number 2 tripped open causing a loss of AC power to safety related 480 volt buses (BU) 2A and 3A. This resulted in a valid start signal for Emergency Diesel Generator (EDG) (EK) 31. The 31 EDG did not start because it was out of service at the time. A four hour report was made to the NRC under 10 CFR 50.72(b)(2)(ii) at about 1910 hours on January 21, 1996.

Operations evaluated this event and determined the event occurred while a Nuclear Plant Operator (NPO) was attempting to pull the left fuse (FU) for the SST secondary side potential transformer (PT) (XPT) which was located in the 6.9 kV switchgear (SWGR) cage. When the NPO attempted to remove the fuse, the fuse pullers slipped and hit a fuse different from the one that was supposed to be removed, causing the top of the fuse that was hit to dislodge from its holder.

The investigation determined that the dislodged fuse caused breaker SS2 between the 6.9 kV bus 2 and 480 volt bus 2A to trip. The undervoltage protection relay (RLY) on the 480 volt bus actuated the engineered safety feature logic whose function was to strip 480 volt bus 2A from 6.9 KV bus 2 and to initiate a start signal to the 31 EDG. Since the 31 EDG was not in service at the time, power was lost to safety related 480 volt buses 2A and 3A. The loss of the equipment required by technical specification as a result of the loss of the buses was limited to residual heat removal (RHR) pump 31, and associated valves. There was no loss of the residual heat removal function since RHR pump 31 was not in service at the time. The corrective action taken at 1655 hours was to repower 480 volt safety related busses 2A and 3A from bus 2.

The investigation determined that the operators had removed the primary PT fuses in accordance with the Protective Tagging Order prior to dispatching the NPO to remove the secondary PT fuses. The removal of the primary PT fuses resulted in the PT compartment door being open and made it difficult to reach the secondary PT fuses. The NPO proceeded to attempt to pull a fuse without first obtaining a ladder. Operations also determined that the NPO used the wrong pair of fuse pullers (the small end of the fuse puller could not be made to fully engage the fuse since it would hit the fuse block first).

CAUSE OF EVENT

The cause of the event was personnel error; when working conditions (i.e., the open compartment and the fuse location) were difficult, an NPO used improper technique and an incorrect tool to attempt to remove the fuses.

CORRECTIVE ACTIONS

The corrective actions that have been or will be taken to prevent recurrence of this event are as follows:

- The Shift Manager counseled the NPO on the errors made and what should have been done.
- NPO training will be conducted on the lessons learned from LER 96-003, including the requirement to set up the proper working conditions prior to starting a job. This training will be complete by July 8, 1996.

ANALYSIS OF EVENT

This event is reportable pursuant to 10 CFR 50.73(a)(2)(iv) because the minimum actuation logic necessary to start EDG 31 operated. This event is considered reportable even though EDG 31 was not operable at the time. The event lasted from 1600 hours to 1655 hours on January 21, 1996.

A review of Licensee Event Reports (LERs) from the past three years identified LERs 95-004, 95-009 and 96-002 associated with safeguards actuation.

SAFETY SIGNIFICANCE

This event did not have a significant affect on the health and safety of the public. Although the event resulted in a loss of buses 2A and 3A (two of the four 480 volt safety buses), the plant remained within the requirements of Technical Specifications 3.7.F.1, 2 and 3 for offsite power sources and buses (Technical Specification 3.7.F.4 was not met for the EDG because EDG 31 and 32 were out of service as reported in LER 96-002). Safety functions were retained because offsite power remained to the other two 480 volt safety related buses and the plant design considers buses 2A and 3A a single safeguards bus. This event was not postulated during power operation because it occurred during recovery from a loss of offsite power event and the plant would not have started with two EDGs out of service.