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)
DIABLO CANYON, UNIT 1	0 5 0 0 0 2 7 5	1 OF 0 3

TITLE (4)

DIESEL GENERATOR NO. 1-2 AUTO 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 NAMES	DOCKET NUMBER(S)
0 1	1 6	8 4	8 4	— 0 0 5	— 0 0	0 2	1 5	8 4		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)			
	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	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)	X 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
W. W. KESSINGER, REGULATORY COMPLIANCE ENGINEER	AREA CODE 8 0 5 5 4 1 7 5 8 6

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)

While in Mode 5 (Cold Shutdown), Diesel Generator No. 1-2 automatically started because of 4 KV Startup Power Bus undervoltage. The cause of this event was operator error in that a licensed operator inadvertently isolated Startup Transformer No. 12 from the 4 KV Vital Bus feeder. This happened during the recovery from a spurious safety injection (ref. LER 84-003), and while the operator was completing a manual bus transfer of the 4 KV Vital Bus power supply back to the Auxiliary Transformer No. 12 Bus. Contributing to the cause was the adjacent location and identical configuration of all the 4 KV breaker position control switches on the Station Electric Panel. This LER is submitted to provide additional information concerning the event notification of February 2, 1984. Corrective action was the installation of a switch guard over the control switch for the 4 KV Startup Power main bus breaker.

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

On January 16, 1984, at 1440 PST, while in Mode 5 (Cold Shutdown), a momentary voltage drop on 120 VAC Vital Instrument Bus 1-1 initiated a spurious safety injection (ref LER 84-003). Prior to this event, 4 KV power was available to Vital Busses F, G, and H (BU) from Auxiliary Transformer No. 12 (XFMR); also aligned was an automatic bus transfer switch allowing for the vital busses to receive power from Startup Transformer No. 12(XFMR) in the event of a safety injection. This bus transfer may also be accomplished using the manual transfer switch - one for each vital bus - located on the Main Control Room control board.

After the spurious safety injection described in LER 84-003, and after the 4 KV power supply had been automatically transferred to the Startup Transformer No. 12 Bus, the control room operators began the process of returning the plant to normal. Part of this evolution included realignment of the vital busses to receive power from the Auxiliary Transformer No. 12 Bus. This is done by using the manual bus transfer switch associated with each vital bus.

Each 4 KV Vital Bus can receive power from one of three sources: an associated diesel generator(DG), Auxiliary Transformer No. 12 Bus, or Startup Transformer No. 12 Bus. The diesel generator supplies power to its associated bus through an incoming breaker, the other two busses each supply a feeder that branches through incoming breakers to each vital bus. The breaker position control switches for each 4 KV Vital Bus are located in one row on the Main Control Room Station Electric Panel. Additionally, Startup Transformer No. 12 Bus is provided a breaker (52-HG-15) (BKR) on the main startup bus. Breaker 52-HG-15 has an associated position control switch located on the Station Electric Panel, directly next to the Vital Bus G startup transformer breaker (52-HG-14) (BKR) position control switch.

Once vital bus power is manually transferred from the startup transformer to the auxiliary transformer by use of the manual bus transfer switch, each vital bus feeder breaker position control switch must have the position indicator flags reset. This is done manually by turning each breaker position control switch to its current position as indicated by position indication lamps located above the switch.

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

When the licensed operator reached to reset the position flag for breaker 52-HG-14, he inadvertently placed his hand on the position control switch for breaker 52-HG-15 (the switches are identical) and rotated it. This action opened breaker 52-HG-15 and caused Diesel Generator No. 1-2 to start on a 4 KV Startup Power undervoltage signal.

Immediate corrective actions consisted of realignment of power supplies to normal and Diesel Generator No. 1-2 shut-down. A further corrective action was the installation of a switch guard over the control switch for breaker 52-HG-15 (4 KV Startup Power main breaker).

The Diablo Canyon Unit 1, 4 KV Electrical System (EB) is designed to provide a reliable source of power to all plant auxiliaries required during any normal or emergency mode of plant operation. The design of the system is such that sufficient independence, or isolation, between the various sources of electrical power is provided to prevent loss of all auxiliary power. Independence and isolation of supply to the various redundant engineered safety features is maintained so a single electrical bus fault will not cause a loss of the plant's engineered safeguards systems.

This LER is submitted to provide additional information concerning the event notification of February 2, 1984.

Should this particular event occur in any other operational mode, the diesel generator would start as designed. This event would, therefore, pose no threat of safety systems failing to function properly and would not cause the loss of a vital electrical bus.

0250d/0007K

PACIFIC GAS AND ELECTRIC COMPANY

PG&E

77 BEALE STREET • SAN FRANCISCO, CALIFORNIA 94106 • (415) 781-4211 • TWX 910-372-6587

JAMES D. SHIFFER
MANAGER
DEPARTMENT OF NUCLEAR PLANT OPERATIONS
NUCLEAR POWER GENERATION

February 15, 1984

PGandE Letter No.: DCL-84-059

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

Re: Docket No. 50-275, OL-DPR-76
Diablo Canyon Unit 1
Licensee Event Report 84-005-00
Automatic Start of Diesel Generator No. 1-2

Gentlemen:

Pursuant to 10 CFR 50.73, the enclosed Licensee Event Report is submitted. This LER concerns the automatic start of Diesel Generator No. 1-2.

This event has in no way affected the public's health and safety.

Sincerely,

for James D. Shiffer

Enclosure

cc: J. B. Martin
M. M. Mendonca
Service List

IE22
1/1