NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

Field	Value
0 1 LICENSEE CODE (2)	O H D B S 1
LICENSE NUMBER (3)	Ø Ø - Ø Ø N P F - Ø 3
LICENSE TYPE (4)	4 1 1 1 1
CAT (5)	
CON'T 0 1 REPORT SOURCE (6)	L
DOCKET NUMBER (7)	Ø 5 Ø - Ø 3 4 6
EVENT DATE (8)	Ø 1 1 5 7 9
REPORT DATE (9)	Ø 2 Ø 9 7 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On 1/15/79 Reactor Coolant Pump (RCP) 1-2-2 was started with an incorrect breaker
0 3 alignment which caused the low voltage relays to trip thus de-energizing both 4.16 KV
0 4 Essential Buses C1 and D1. Both Emergency Diesel Generators (EDG) responded and ener-
0 5 gized both buses and supplied power to the essential plant loads. The reactor was
0 6 shutdown at the time of the occurrence. Both buses were returned to the normal lineup
0 7 within 12 minutes. (NP-33-79-14)
0 8

0 9	SYSTEM CODE (11)	CAUSE CODE (12)	CAUSE SUBCODE (13)	COMPONENT CODE (14)	COMP. SUBCODE (15)	VALVE SUBCODE (16)
	E B	A	A	Z Z Z Z Z Z	Z	Z

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	7 9	—	Ø 1 1	/	Ø 3	L	—	Ø

ACTION TAKEN (18)	FUTURE ACTION (19)	EFFECT ON PLANT (20)	SHUTDOWN METHOD (21)	HOURS (22)	ATTACHMENT SUBMITTED (23)	NPRD-4 FORM SUB. (24)	PRIME COMP. SUPPLIER (25)	COMPONENT MANUFACTURER (26)
G	F	Z	Z	Ø Ø Ø Ø	Y	N	Z	Z Z Z Z

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Starting a RCP required the intentional entry into the Action Statment of T.S. 3.8.2.1
1 1 by closing the tie breaker of the essential buses. Personnel error in the alignment of
1 2 breakers caused the de-energization. A Facility Change Request was submitted to re-
1 3 quest a design change to allow the low voltage breaker trip be manually defeated dur-
1 4 ing the starting of 13.8 KV motors.

1 5	FACILITY STATUS (28)	% POWER (29)	OTHER STATUS (30)	METHOD OF DISCOVERY (31)	DISCOVERY DESCRIPTION (32)
	G	Ø Ø Ø	NA	A	NA

1 6	ACTIVITY RELEASED (33)	CONTENT OF RELEASE (34)	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
	Z	Z	NA	NA

PERSONNEL EXPOSURES

1 7	NUMBER (37)	TYPE (38)	DESCRIPTION (39)
	Ø Ø Ø	Z	NA

PERSONNEL INJURIES

1 8	NUMBER (40)	DESCRIPTION (41)
	Ø Ø Ø	NA

LOSS OF OR DAMAGE TO FACILITY (43)

1 9	TYPE (42)	DESCRIPTION
	Z	NA

PUBLICITY

2 0	ISSUED (44)	DESCRIPTION (45)
	N	NA

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NRC USE ONLY

DVR 79-017

NAME OF PREPARER James Marley

PHONE: 419-259-5000, Ext. 276

TOLEDO EDISON COMPANY
DAVIS-BESSE NUCLEAR POWER STATION UNIT ONE
SUPPLEMENTAL INFORMATION FOR LER NP-33-79-14

DATE OF EVENT: January 15, 1979

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Loss of both 4.16 KV Essential Buses while starting Reactor Coolant Pump 1-2-2

Conditions Prior to Occurrence: The unit was in Mode 3, with Power (MWT) = 0, and Load (Gross MWE) = 0.

Description of Occurrence: On January 15, 1979 at 1118 hours, the Reactor Operator was preparing to start Reactor Coolant Pump (RCP) 1-2-2 per Modification T-3444 to SP 1103.06, "Reactor Coolant Pump Operating Procedure", and closed the tie breaker AACD1 causing an intentional entry into the Action Statement of Technical Specification 3.8.2.1. Technical Specification 3.8.2.1 requires that the AC Electrical Buses C1, D1, E1, F1, Y1, Y2, Y3, and Y4 be operable and energized with tie breakers open between redundant buses.

Due to personnel error, RCP 1-2-2 was started with an incorrect breaker aligmment which caused a low voltage condition to exist on both 4.16 KV Essential Buses C1 and D1. This low voltage condition caused the low voltage relays to trip open the C1 and D1 Bus Feeder Breakers AC110 and AD110, thus de-energizing both 4.16 KV Essential Buses C1 and D1. Both Emergency Diesel Generators responded and energized both C1 and D1 Buses and supplied power to the essential plant loads.

On January 15, 1979 at approximately 1130 hours, both 4.16 KV Essential Buses C1 and D1 feeds were returned to normal by switching from Emergency Diesel Generators 1 and 2 to the normal feeds from the C2 and D2 Buses, respectively. The normal breaker alignment for the 4.16 KV D2 Bus was re-established by closing Breaker ABDD2 and opening tie breaker AACD1, thus removing the unit from the Action Statement of Technical Specification 3.8.2.1.

Designation of Apparent Cause of Occurrence: The cause of the occurrence was personnel error. The operator was following an approved procedure modification (T-3444) which required the intentional entry into the Action Statement of Technical Specification 3.8.2.1 by closing the tie breaker of the redundant 4.16 KV Essential Buses. Personnel error in the alignment of breakers prior to the starting of RCP 1-2-2 resulted in the de-energization of both 4.16 KV Essential Buses when RCP 1-2-2 was started. When a 13.8 KV motor (RCP or Circulating Water Pump) is started, there is a prolonged voltage drop that carries through to the 4.16 KV Essential Bus C1 or D1 which causes undervoltage relays to initiate the start of an Emergency Diesel Generator.

Analysis of Occurrence: There was no danger to the health and safety of the public or to unit personnel. Both Emergency Diesel Generators 1 and 2 supplied energy to the essential plant loads. Plant conditions were such that the brief loss of both essential 4.16 KV Buses did not adversely affect plant equipment.

Corrective Action: Both 4.16 KV Essential Buses C1 and D1 were re-energized when the Emergency Diesel Generators were transferred to the C1 and D1 Buses. The operator restored the D2 Bus breaker alignment to normal by closing Breaker ABDD2 and opening the Breaker AACD1, thus removing the unit from the Action Statement of Technical Specification 3.8.2.1.

Facility Change Request (FCR) 77-430 was submitted on October 28, 1977 to modify the existing situation and allow a Circulating Water Pump or Reactor Coolant Pump to be started without initiating an Emergency Diesel Generator startup by allowing the essential bus feeder low voltage breaker trip (90%) to be manually defeated during the starting of the RCP or Circulating Water Pump.

During the interim period until completion of FCR 77-430, Modification T-3444 to SP 1103.06, "Reactor Coolant Pump Operating Procedure" was written. This modification switches the normal feed of the affected 4.16 KV Essential Bus to its alternate feed prior to starting a RCP, thus preventing the inadvertent transfer of supply power of 4.16 KV Essential Bus C1 (D1) from the 4.16 KV Bus C2 (D2) to Emergency Diesel Generator 1 (2), resulting from a low voltage condition.

This incident will be reviewed with all operations personnel involved, and the importance of proper breaker alignment prior to starting the 13.8 KV equipment will be stressed.

Failure Data: Prior occurrences of a 4.16 KV Essential Bus being de-energized as a result of personnel error were previously reported in Licensee Event Reports NP-33-78-72 and NP-33-78-81.

LER #79-010