Met-Ed / GPU

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Writer's Direct Dial Number

July 23, 1980
TLL 363

Office of Inspection and Enforcement
Attn: Mr. Boyce H. Grier, Director
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Sir:

Three Mile Island Nuclear Station, Unit II (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Licensee Event Report 80-031/03L-0

Attached please find Licensee Event Report 80-031/03L-0 concerning the Gray Balance of Plant Diesel Generator trip on June 23, 1980.

This event constitutes a violation of Section 3.8.1.1.c and is considered reportable under Section 6.9.1.9.b of the Interim Recovery Technical Specifications.

Sincerely,

G. K. Hovey
Director, TMI-II

GKH:SDC:dad

Attachments

cc: J. T. Collins
B. J. Snyder

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TLL 363

NRC FORM 366 (7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

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

0 1 | LICENSEE CODE: P A T M I 2 (2) | LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 (3) | LICENSE TYPE: 4 1 1 1 1 (4) | CAT: (5)

CON'T 0 1 | REPORT SOURCE: L (6) | DOCKET NUMBER: 0 5 0 0 0 3 2 0 (7) | EVENT DATE: 0 6 2 3 8 0 (8) | REPORT DATE: 0 7 2 3 8 0 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 [During recovery operations (cold shutdown decay heat removal), the Gray Balance of
0 3 Plant (BOP) Diesel Generator tripped during surveillance testing ~~on June 23, 1980~~.
0 4 The diesel generator was manually restarted, loaded and run for 1 hour. The
0 5 surveillance testing was performed again, successfully, on June 24, 1980.] This
0 6 event had no effect on the plant, its operation, or the health and safety of the
0 7 public.
0 8

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

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
8 0	—	0 3 1	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
X (18)	X (19)	Z (20)	Z (21)	0 0 0 0 0	Y (23)	N (24)	Z (25)	Z 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 [The seq^(uence) of events of the trip indicated a loose electrical connection was most likely
1 1 the cause of the event. A check was made of the skid mounted control panel wiring
1 2 but no loose connections were found. Subsequently, all control panel connections
1 3 were tightened. The event of LER 80-29 provided sufficient information to
1 4 identify and correct a damaged electrical connection ^(between the speed sensor and speed switch.)]

FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5 X (28)	0 0 0 (29)	Recovery Mode	B (31)	Operator Observation

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

PERSONNEL EXPOSURES

NUMBER	TYPE	DESCRIPTION (39)
1 7 0 0 0 (37)	Z (38)	N/A

PERSONNEL INJURIES

NUMBER	DESCRIPTION (41)
1 8 0 0 0 (40)	N/A

LOSS OF OR DAMAGE TO FACILITY (43)

TYPE	DESCRIPTION
1 9 Z (42)	N/A

PUBLICITY (45) 8008040022

ISSUED	DESCRIPTION	NRC USE ONLY
2 0 Z (44)	N/A	

NAME OF PREPARER Steven D. Chaplin PHONE: (717) 948-8693

LICENSEE EVENT REPORT
NARRATIVE REPORT

TMI-II

LER 80-031/03L-0
EVENT DATE - June 23, 1980

I. EXPLANATION OF OCCURRENCE

On June 23, 1980, the Gray Balance of Plant (BOP) diesel generator was started per surveillance procedure 4303-Q1 (BOP Diesel Generator Functional Test - simulation of Loss of Power event). After the diesel was started, the Auxiliary Operator synchronized the generator and closed the generator breaker. As the Aux. Operator was about to begin loading the diesel (about 45 seconds after closing the breaker), the engine tripped resulting in a subsequent reverse power trip of the generator breaker. The diesel was manually restarted, loaded, and run for one hour without reoccurrence of the trip.

II. CAUSE OF OCCURRENCE

The sequence of events indicated a loose electrical connection was most likely the cause of the event.

III. CIRCUMSTANCES SURROUNDING THE OCCURRENCE

At the time of the occurrence, the Unit II facility was in a long-term cold shutdown state. The reactor decay heat was being removed via natural circulation to the A steam generator which is operating in a 'steaming' mode. Throughout the event, there was no Loss of Natural Circulation heat removal in the RCS System.

IV. CORRECTIVE ACTIONS TAKEN OR TO BE TAKEN

IMMEDIATE

Observations by the engineer performing the trouble shooting, lead him to believe the fault was in the skid-mounted control panel. A check was performed of the wiring in the panel to detect any loose connections; however, no loose connections were found. The Gray BOP Diesel Generator was then manually restarted, loaded, and run for one hour without reoccurrence of the problem. No other probable causes of the trip could be identified. On June 24, 1980, all terminations inside the skid-mounted panel were tightened. The testing by procedure 4303-Q1 was then performed again successfully (again without any reoccurrence of the trip).

LONG TERM

The diesel generator trip was under investigation as to possible mechanical or electrical malfunctions which could have been responsible when the failure to start event occured on July 14, 1980. The additional information available due to this second event resulted in the determination and correction of the problem.

V. COMPONENT FAILURE DATA

N/A

VI. OTHER RELEVANT INFORMATION

The cause of the BOP diesel trip on June 23, 1980, was determined as a result of investigation subsequent to a July 14, 1980, Gray BOP Diesel Generator failure to start. Reference LER 80-029/1P prompt notification letter TLL 353 On July 17, 1980. The failure to start on July 14, 1980, was due to a damaged connection between the wiring (from the diesel's speed switch) and the speed sensor (at the speed sensor). This resulted in a loss of signal to the speed switch which in turn tripped the diesel generator. Upon determination of the cause, the damaged connection was repaired and the diesel generator returned to service. It was concluded that this faulty connection was the cause for the diesel generator trip of June 23, 1980.

NOTE: Details as to the cause, discovery, and corrective actions relevant to the July 14, 1980, event will be supplied in the above referenced LER. Additionally, it should be noted that the cause of the damaged connection was due to external forces and not due in any way to the diesel generator's operation or its assocaited vibration. The diesel generator's vibration did, however, cause the intermittent loss of continuity through the damaged connection and resultant diesel generator trip.