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: O H D B S 1 (2) | LICENSE NUMBER: Ø Ø - Ø Ø Ø Ø Ø - Ø Ø (3) | LICENSE TYPE: 4 1 1 1 1 (4) | CAT (5)

CON'T 0 1 | REPORT SOURCE: L (6) | DOCKET NUMBER: Ø 5 Ø Ø Ø 3 4 6 (7) | EVENT DATE: Ø 5 2 7 8 3 (8) | REPORT DATE: Ø 6 2 4 8 3 (9)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 (NP-33-83-34) On 5/27/83 at 0955 hours and again on 6/7/83 at 1510 hours, Emergency
0 3 Diesel Generator (EDG) 1-1 tripped on overspeed immediately after startup during the
0 4 performance of ST 5081.01, the EDG Monthly Surveillance Test. On both occurrences,
0 5 EDG 1-1 was declared inoperable, placing the unit in the action statement of Technical
0 6 Specification 3.8.1.1. There was no danger to the health and safety of the public or
0 7 station personnel. The remaining AC sources, including EDG 1-2, were operable during
0 8 this occurrence.

0 9 | SYSTEM CODE: E B (11) | CAUSE CODE: D (12) | CAUSE SUBCODE: Z (13) | COMPONENT CODE: M E C F U N (14) | COMP. SUBCODE: Z (15) | VALVE SUBCODE: Z (16)

(17) LER/RO REPORT NUMBER | EVENT YEAR: 8 3 | — | SEQUENTIAL REPORT NO.: Ø 2 7 | / | OCCURRENCE CODE: Ø 3 | REPORT TYPE: L | — | REVISION NO.: Ø

ACTION TAKEN: E (18) | FUTURE ACTION: G (19) | EFFECT ON PLANT: Z (20) | SHUTDOWN METHOD: Z (21) | HOURS (22): Ø Ø Ø Ø | ATTACHMENT SUBMITTED: Y (23) | NPRD-4 FORM SUB.: Y (24) | PRIME COMP. SUPPLIER: N (25) | COMPONENT MANUFACTURER: W 2 9 Ø (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The cause is twofold. First, the installed engine tachometer was found to be out of
1 1 calibration. The second problem involved an incorrect setting in the Woodward Governor
1 2 EGB-10C bulletin for the adjustment of the speed compensating needle valve. ST 5081.01
1 3 was successfully completed, and EDG 1-1 declared operable on 5/27/83 at 1430 hours
1 4 (cause was thought to be different until 6/7/83 event) and at 1740 hours on 6/8/83.

1 5 | FACILITY STATUS: E (28) | % POWER: Ø 9 1 (29) | OTHER STATUS (30): NA | METHOD OF DISCOVERY: B (31) | DISCOVERY DESCRIPTION (32): During performance of ST 5081.01

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

PERSONNEL EXPOSURES
1 7 | NUMBER: Ø Ø Ø (37) | TYPE: Z (38) | DESCRIPTION (39): NA

PERSONNEL INJURIES
1 8 | NUMBER: Ø Ø Ø (40) | DESCRIPTION (41): NA

LOSS OF OR DAMAGE TO FACILITY (43)
1 9 | TYPE: Z (42) | DESCRIPTION: NA

PUBLICITY
2 0 | ISSUED: N (44) | DESCRIPTION (45): NA | NRC USE ONLY

8307060220 830624
PDR ADOCK 05000346
S PDR

DVR 83-068 & 071

NAME OF PREPARER: Kevin Melstad PHONE: 419-259-5000, Ext. 250

GPO 917-926

TOLEDO EDISON COMPANY
DAVIS-BESSE NUCLEAR POWER STATION UNIT ONE
SUPPLEMENTAL INFORMATION FOR LER NP-33-83-34

DATE OF EVENT: May 27 and June 7, 1983

FACILITY: Davis-Besse Unit 1

IDENTIFICATION OF OCCURRENCE: Emergency Diesel Generator (EDG) 1-1 tripped on overspeed during startup

Conditions Prior to Occurrence: On May 27, 1983, the unit was in Mode 1, with Power (MWt) = 2502 and Load (Gross MWe) = 829. On June 7, 1983, the unit was in Mode 1 with Power (MWt) = 2514 and Load (Gross MWe) = 833

Description of Occurrence: On May 27, 1983 at 0955 hours and again on June 7, 1983 at 1510 hours, EDG 1-1 tripped on overspeed immediately after startup during the performance of ST 5081.01, the EDG Monthly Suveillance Test. On both occurrences, EDG 1-1 was declared inoperable, placing the unit in the action statement of Technical Specification 3.8.1.1. The requirements of action statement (a) were satisifed on both occurrences by the performance of Surveillance Tests ST 5081.01, "Independent Offsite AC Sources Lined Up and Available" and ST 5081.01 Step 6.1.5 (≤10 seconds start to at least 900 rpm) on EDG 1-2.

Designation of Apparent Cause of Occurrence: There were two apparent causes of this occurrence. First, the installed engine tachometer was found to be out of calibration. The installed engine tachometer is used to set the governor high speed stop. The indicated rpm was approximately 40 rpm less than the actual engine rpm, resulting in the high speed stop being set at approximately 985 rpm instead of at the desired setpoint of 945 rpm.

The second problem was found to be with the adjustment on the speed compensating needle valve on the governor. The governor actuator service bulletin called for the needle valve to be open approximately 1/8 of a turn, however, it was determined from the vendor that the needle valve should be approximately 1/2 to 3/4 of a turn open. The speed compensating needle valve works along with the buffer piston enabling the governor to respond to speed/load changes and react almost immediately and then return to a stable condition. The needle valve must be open far enough to enable the governor to have a quick response time to all speed/load changes but must not be open too far or else the governor will not be able to maintain its stability. With the needle valve not open far enough, the diesel was not able to throttle down fast enough after reaching the 985 rpm high speed stop. It overshot the 985 rpm stop and reached the 1025 rpm overspeed trip before being able to adjust the throttle.

The current governor was installed on April 29, 1983, and all adjustments were made according to the service bulletin. The needle valve adjustment on the previous governor was determined to have been set at 3/4 of a turn open.

Analysis of Occurrence: There was no danger to the health and safety of the public or station personnel. The remaining AC sources, including EDG 1-2 were operable during the time of this occurrence.

Corrective Action: On May 27, 1983, the cause of the overspeed trip was thought to be due to an air bubble trapped in the hydraulic oil system. To ensure that all the air was out of the governor oil, Maintenance personnel performed the bleed off procedure on the hydraulic actuator. EDG 1-1 was then started and stopped three times without any additional problems. ST 5081.01 was successfully performed, and EDG 1-1 was declared operable at 1430 hours on May 27, 1983.

On June 7, 1983, the needle valve was adjusted to 3/4 of a turn open per Maintenance Work Order 83-3508. The high and low speed stops were readjusted to calibrated hand tachometers under Maintenance Work Order 83-3521. EDG 1-1 was restarted numerous times without any further problems. On June 8, 1983 ST 5081.01 was successfully completed, and EDG 1-1 declared operable at 1740 hours.

The installed tachometers on both EDGs have been placed into a two year calibration program. Also, in the future, the governor will be set up to a calibrated hand tachometer.

Woodward Governor has been requested to update their EGB-10C governor/actuator bulletin to reflect this change in the compensating needle valve adjustment. In addition, Engineering will verify that the Station's current governor/actuator bulletin includes the latest revision. A Maintenance Instruction will also be written for installing and adjusting the governor for proper operation.

The needle valve adjustment on the EDG 1-2 governor was checked and was found to be set at 3/4 of a turn open.

Failure Data: There have been no previous similar occurrences.

LER #83-027

TOLEDO EDISON

June 24, 1983

Log No. K83-924
File: RR2 (NP-33-83-34)

Docket No. 50-346
License No. NPF-3

Mr. James G. Keppler
Regional Administrator, Region III
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

LER No. 83-027
Davis-Besse Nuclear Power Station Unit 1
Date of Occurrence: May 27, 1983

Enclosed are three copies of Licensee Event Report 83-027 which are being submitted in accordance with Technical Specification 6.9 to provide 30 day written notification of the subject occurrence.

Yours truly,

Terry D. Murray/SMQ

Terry D. Murray
Station Superintendent
Davis-Besse Nuclear Power Station

TDM/ljk

Enclosures

cc: Mr. Richard DeYoung, Director
Office of Inspection and Enforcement
Encl: 30 copies

Mr. Norman Haller, Director
Office of Management and Program Analysis
Encl: 3 copies

Mr. Tom Peebles
NRC Resident Inspector
Encl: 1 copy

IE22
III

JUN 29 1983