



Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690



BBS Ltr. #255-75

Dresden Nuclear Power Station
R. R. #1
Morris, Illinois 60450
April 15, 1975

Mr. James G. Keppler, Regional Director
Directorate of Regulatory Operation-Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

SUBJECT: REPORT OF ABNORMAL OCCURRENCE PER SECTION 6.6.A OF THE TECHNICAL
SPECIFICATIONS
UNIT 2 DIESEL GENERATOR FIELD FAILED TO FLASH

- References:
- 1) Regulatory Guide 1.16 Rev. 1 Appendix A
 - 2) Notification of Region III of U. S. Nuclear Regulatory Commission
Telephone: P. Johnson, 1520 hours on April 7, 1975
Telegram: J. Keppler, April 7, 1975
 - 3) Drawing Numbers 12E-2336 & 12E-2350A
 - 4) Letter from B. B. Stephenson to J. Keppler, Report Number
50-237/1975-18

Report Number: 50-237/1975-20

Report Date: April 15, 1975

Occurrence Date: April 5, 1975

Facility: Dresden Nuclear Power Station, Morris, Illinois

IDENTIFICATION OF OCCURRENCE

The unit 2 diesel generator failed to field flash when started after a routine monthly inspection, which represents a condition which could have prevented the performance of the intended safety function of an engineered safety feature system.

CONDITIONS PRIOR TO OCCURRENCE

Unit 2 was in the cold shutdown mode during an extended refueling outage. The unit 2 diesel generator was being returned to service following a monthly inspection.

8304130570 750415
PDR ADOCK 05000237
S PDR

AIR - C 2010

50 237
incident

4274

COPY SENT REGION III

DESCRIPTION OF OCCURRENCE

On April 5, 1975 at approximately 1700 hours, the Unit 2 diesel generator was started but did not come up to voltage.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE (Component Failure)

The apparent cause for failure has been determined to be a shorted capacitor. The capacitor paralleled the relay that flashes the field. The short lowered the voltage across the relay to a point at which the contacts closed intermittently.

ANALYSIS OF OCCURRENCE

The health and safety of the public were not in jeopardy due to this occurrence. Unit 2 was in a refueling outage and no work was being done that had potential for draining the core. The Unit 2/3 diesel generator was available to act as a backup if necessary.

CORRECTIVE ACTION

Following the initial failure, several additional starts were made to locate the source of the problem. The trouble was traced to the Vs relay where abnormal readings were found. The circuit board containing the field flashing circuitry was taken to the shop where further testing indicated the capacitor to be faulty.

The capacitor was replaced and another identical capacitor in the circuit checked immediately.

FAILURE DATA

A similar incident occurred on the Unit 2 diesel generator on March 19, 1975 (Report Number 50-237/1975-18). The source of trouble, at that time, was thought to be dirty external contacts on the Vs relay. The corrective action (see the above mentioned letter) to add contact inspection to the diesel surveillance schedule will be dropped, since the difficulty was found to be in the capacitor.

The diesel generator was purchased from Western Engine Company and manufactured by Electro-Motive Division, General Motors Corporation. It is rated at 2500 kw, 4160 V and 900 RPM. The capacitor is an 8 microfarad, 150 volt electrolytic capacitor manufactured by Aerovox.

Arthur M Roberts
for E. B. Stephenson
Superintendent

EBS:JEM:smp

File/NRC