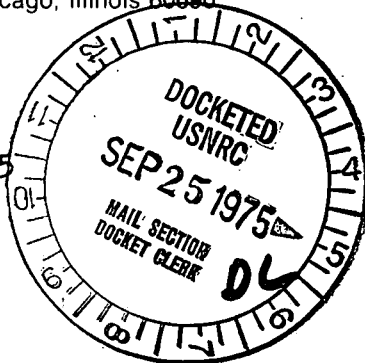




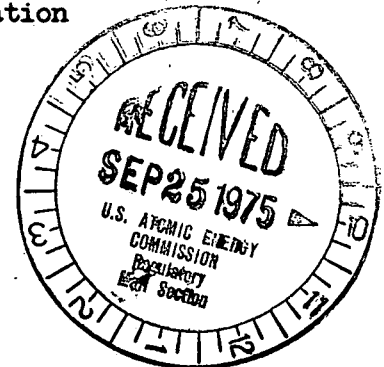
**Commonwealth Edison**  
 One First National Plaza, Chicago, Illinois  
 Address Reply to: Post Office Box 767  
 Chicago, Illinois 60690

**Regulatory Docket File**

BBS Ltr. #623-75



Dresden Nuclear Power Station  
 RR #1  
 Morris, Illinois 60450  
 September 19, 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 2/3 DIESEL GENERATOR COOLING WATER PUMP TRIP AND FOLLOW-UP LETTER TO REPORT NUMBER 50-237/75-42

- References:
- 1) Regulatory Guide 1.16 Rev. 1 Appendix A
  - 2) Notification of Region III of U. S. Nuclear Regulatory Commission  
 Telephone: P. Johnson, 1530 hours on September 11, 1975  
 Telegram: J. Keppler, 1620 hours on September 11, 1975
  - 3) Drawing Number M-355, 12E2351B
  - 4) Letter from B. B. Stephenson to J. G. Keppler, Report Number 50-237/75-42

Report Number: 50-237/75-43

Report Date: September 19, 1975

Occurrence Date: September 11, 1975

Facility: Dresden Nuclear Power Station, Morris, Illinois

**IDENTIFICATION OF OCCURRENCE**

The breaker feeding the Unit 2/3 diesel generator cooling water pump from bus 28-3 tripped.

**CONDITIONS PRIOR TO OCCURRENCE**

Unit-2 was operating at a steady-state power level of 2466 MWT and 812 MWe.  
 Unit-3 was in the cold shutdown mode.

SEP 22 1975

10146

DESCRIPTION OF OCCURRENCE

At approximately 0300 hours on September 11, 1975, the main breaker of the Unit 2/3 diesel generator cooling water pump was found tripped. The pump had been tested the day before in order to identify the problem which had caused the breaker to trip on two previous occasions (August 29 and September 5, 1975) reported in A.O. 50-237/75-42.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE

The breaker trips were apparently caused by excessive heat build-up within the breaker housing. Inadequate heat transfer would cause the breaker to trip at a lower than rated current.

The motor control center containing the breaker has gasketed covers which do not provide significant ventilation. In addition, the rather high ambient temperature of the breaker's physical location is believed to intensify the thermal transfer problems.

ANALYSIS OF OCCURRENCE

The diesel generator cooling water pumps would have operated from the reserve bus 38-3 had the generator started while breaker 28-3 was tripped. The Unit-2 diesel generator was also operable and capable of providing the necessary emergency power. The health and safety of plant personnel and the public were not jeopardized by this occurrence.

CORRECTIVE ACTION

On September 11, 1975, the cooling water pump was re-started to monitor current drawn by the pump at the moment a breaker trip occurred. The pump operated for two hours and fifty minutes before the breaker on bus 28-3 tripped. The feed was automatically transferred to bus 38-3. After two hours of pump operation the breaker on bus 38-3 tripped. The current drawn by the pump remained at its rating of 130 amps throughout the test, indicating that the breakers themselves were at fault.

The breakers on both buses were replaced and the cover plates above the breakers were removed for ventilation. The pump was subsequently operated for 24 hours without incident.

The original breakers were load-tested for four hours and exhibited no abnormal characteristics. Disassembly of the breakers revealed no loose connections or other internal discrepancies. The breakers will be returned to the manufacturer for further analysis.

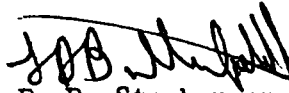
The original motor control center covers will be replaced with louvered plates to allow adequate ventilation. Further corrective action will be dependent upon the discovery of other contributing factors, in which case a follow-up letter will be submitted.

This letter is submitted in lieu of the supplemental report designated in report no. 50-237/75-42, dated September 8, 1975.

FAILURE DATA

A similar failure of the Unit-3 diesel generator cooling water pumps was reported on December 21, 1973. A loose connection in the breaker resulted in thermally-induced trips.

The failed breakers are General Electric TFJ236150 breakers, rated at 480 volts and 150 amps.

  
B. B. Stephenson  
Superintendent

BBS:smp

File/NRC