

Commonwealth Edison Byron Nuclear Station 4450 North German Church Road Byron, Illinois 61010

ORIG + 1 PRIORITY ROUTING

October 27, 1987

LTR: BYRON 87-1017

Mr. A. Bert Davis Regional Administrator Region 3 799 Roosevelt Poad Glen Ellyn, Illinois 60137

Dear Sir:

This report is submitted in accordance with Byron Station Unit 1 Operating License NPF-37 Appendix A, Technical Specification 4.8.1.1.3, reporting of Diesel Generator Failures.

This report addresses one valid test and failure experienced on the 1B Diesel Generator. The criteria to determine valid tests and failures is in accordance with Section C.2.e of Regulatory Guide 1.108.

On August 14, 1987, the 1B diesel generator was started per the quarterly slave relay surveillance, 1BOS 3.2.1-816. Following the start, the system test engineer noticed that the governor was hunting. The diesel was then taken to manual test mode and again, governor hunting was observed. The 1B diesel generator was shutdown at 1505 and Limiting Condition for Operation Action Requirement (LCOAR) 8.1.1-la was entered. Following two maintenance runs, it was decided to replace the 4EX3 relay. The 4EX3 relay provides an electric signal to the engine electronic governor for speed droop mode during testing, and for isochronous mode during emergency operation. Intermittent operation of this relay can cause the governor to loose its speed reference, which in turn causes the instability. Following installation of the new 4EX3 relay the diesel was started for a maintenance run. All parameters were normal. At 2036 on 8/14/87, the 1B diesel generator started per the monthly operability surveillance, 1BOS 8.1..1.2.a-2. At 2356 the surveillance was successfully completed and the LCOAR was exited.

The root cause for this event was intermittent operation of the 4EX3 rel '. Byron Station is currently investigating the possibility of replacing the relay with a more reliable relay. This investigation will be tracked by Action Item Record (AIR 454-512-87-0257).

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The 1B diesel generator was inoperable for 8 hours and 51 minutes as a result of this event. This failure was the first failure during the last twenty valid tests, therefore the 1B diesel generator will remain on a monuly testing schedule per Table 4.8-1 of Technical Specification 4.8.1.1.2.

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R. E. Querio Station Manager Byron Nuclear Power Station

REQ/MMR/JC/bf (0036z)

cc: P. Brochman, NRC Senior Resident Inspector U.S. NRC Document Control Desk, Washington, D.C. INPO Record Center CECo Distribution List R. Williams J. Cook