



Commonwealth Edison
 Dresden Nuclear Power Station
 R.R. #1
 Morris, Illinois 60450
 Telephone 815/942-2920

Central Files

April 10, 1978

BBS Ltr: 78-397

50-237
50-249

James G. Keppler, Director
 Division of Inspection and Enforcement-Region III
 U.S. Nuclear Regulatory Commission
 799 Roosevelt Road
 Glen Ellyn, IL 60137

Dear Mr. Keppler:

This letter updates the Dresden diesel generator reliability study outlined in the report sent to you on March 3, 1978, and provides the status and our best estimate of a schedule for completion of the actions under investigation to improve diesel generator reliability. The status of the augmented weekly surveillance testing program is also provided.

The status of the corrective actions under investigation are given below along with an estimated completion schedule. These item numbers correspond to those listed in Attachment B of the March 3 letter.

<u>ITEM UNDER INVESTIGATION</u>	<u>STATUS AND COMPLETION SCHEDULE</u>
1) Multiple Start attempt modification.	Diesel vendor expected to submit modification details by April 15, 1978. Dresden will then evaluate the modification by June 1, 1978 to determine if it should be initiated.
2) Air start piping modification to allow blowdown	Engineering review already in progress Mod to be completed by May 31, 1978
3) Governor modification to allow idling	Same as item #1

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ITEM UNDER
INVESTIGATION

STATUS AND COMPETION SCHEDULE

- | | | |
|-----|--|---|
| 4) | HPCI/LPCI room cooling modification | Installation to begin in May. Estimated completion date is June 31, 1978. |
| 5) | Cooling water pump bearing problem | a) A wye strainer will be installed in bearing lube cooling line. Modification package approved. Installation to be complete by June 31, 1978.

b) A cooling water pump bearing inspection will be done annually |
| 6) | Review of Preventive maintenance program | Review and changes to be made by July 31, 1978. |
| 7) | Procedure change to one-hour surveillance run | Completed |
| 8) | Capacitor lifetime study | Investigation completed. A detailed study was made to determine the lifetime of the capacitors in the diesel speed sensing circuitry. It was found that the capacitors recently installed are expected to have a lifetime of 8 years at operating temperature. It was therefore, determined that the current five year replacement schedule is adequate |
| 9) | Study to determine components affected by start stop operation | Proposal to do this study due from MPR Associates by April 30, 1978. |
| 10) | Diesel fuel oil day tank overflow piping change | Changes approved by station. Funnels will be installed in piping by June 31, 1978. |
| 11) | Loose wire investigation | This problem will be investigated by our Station Nuclear Engineering Dept. Their recommendations are due by May 31, 1978. |

The augmented weekly diesel generator surveillance testing program results since December 6, 1977 are as follows:

<u>D/G</u>	<u>STARTS</u>	<u>FAILURES</u>	<u>VALID STARTS SINCE LAST FAILURE</u>
2	27	1	21
2/3	34	2	12
3	24	0	29

The one failure of the unit-2 diesel to start occurred on January 3, 1978 and was caused by a loose terminal connection. This incident also revealed the probable cause of a failure that occurred in December, 1977, which had not been previously identified.

There were two failures of the unit 2/3 diesel generator to start: one on March 7, 1978 (RO 78-020/03L-0) and the other on March 8, 1978 (RO 78-021/03L-0). The cause of the first event is believed to be the result of a faulty air start solenoid. However, nothing could initially be found wrong with the valve. It was replaced and removed valve was sent to the vendor for further tests.

The second failure, occurring on March 8, 1978, was an overspeed trip. It was found that the governor compensation adjustment which affects the speed overshoot was set too close to the trip point causing occasional trips. This is believed to be the cause for the two overspeed trips that occurred on this diesel in June and July, 1977.

The weekly surveillance program will continue for each diesel generator until 23 consecutive successful valid starts occur. The unit-3 diesel has reached this point and has been returned to the normal monthly surveillance schedule. The other two diesels will remain on the weekly surveillance until they have 23 consecutive successful starts.

A Dresden Technical Staff person will maintain up to date records for NRC review showing the status of each of the eleven corrective actions mentioned above.

B. R. Shelton for 4/10

B.B. Stephenson
Station Superintendent
Dresden Nuclear Power Station

BBS:JBM:av

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