

PHILADELPHIA ELECTRIC COMPANY

LIMERICK GENERATING STATION

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J. DOERING, JR.
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LIMERICK GENERATING STATION

August 25, 1992

Docket No. 50-353
License No. NPF-85

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

SUBJECT: Limerick Generating Station, Unit 2
Special Report for a Valid Emergency
Diesel Generator Test Failure

REFERENCE: Technical Specification Section 4.8.1.1.3 and 6.9.2

This Special Report is being submitted pursuant to the requirements of Technical Specifications (TS) Section 6.9.2 as required by TS Section 4.8.1.1.3. TS Surveillance Requirement 4.8.1.1.3 requires reporting of all diesel generator failures, valid or nonvalid, within 30 days. The report is required to include the information recommended in Regulatory Position C.3.b of Regulatory Guide (RG) 1.108, Revision 1, August 1977, "Periodic Testing of Diesel Generator Units used as Onsite Electric Power System at Nuclear Power Plants."

On July 30, 1992, with Unit 2 at 100% power level, plant personnel were performing Surveillance Test (ST) procedure ST-6-092-314-2, "D24 Diesel Generator Slow Start Operability Test Run." While the ST procedure was in progress, Operations personnel reported intermittent speed control response while attempting to synchronize the D24 Emergency Diesel Generator (EDG) to the associated 4KV Safeguard bus. The D24 EDG was then secured.

Troubleshooting was conducted on July 30, 1992, to determine the cause of the intermittent speed control on the D24 EDG. This troubleshooting revealed that loose fuse clip contacts in the 125VDC control circuit were the cause of the intermittent speed control. The fuse clip contacts were tightened and procedure ST-6-092-314-2 was successfully performed on July 30, 1992. The loose fuse clip contacts caused an intermittent loss of the 125VDC control voltage.

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After the D24 EDG was returned to service, a circuit analysis revealed that a condition may have existed that could have prevented the L24 EDG output breaker from closing due to the loss of the 125 VDC control circuit. This condition would have prevented the D24 EDG from supplying power to the associated 4KV Safeguard bus. The operability of the D24 EDG could not have been assured following a design basis event such as a safe shutdown earthquake. The D24 EDG would not have been able to provide emergency power to the Division 4 4KV Safeguard bus while it was unavailable for approximately two hours during troubleshooting. In the event of an actual loss of emergency power, the three other Unit 2 EDGs would have provided emergency A.C. power to bring Unit 2 to the safe shutdown condition.

The generic implications of this event have been assessed. As a result, the remaining Unit 1 and Unit 2 diesel generator control systems were inspected and confirmed to have no loose fuse clips. This is the first time this type of failure has been observed on the (8) EDGs at Limerick Generating Station and no further action regarding the fuse clips is planned at this time.

The D24 EDG failure was classified as a valid failure using the guidance of RG 1.108, Revision 1, August 1977, Section C.2.e(6). Because this event is the first valid failure for the D24 EDG, the ST procedure frequency is not required to be changed. This conforms with TS Table 4.8.1.1.2-1.

If you have any questions, please contact Mr. Gil J. Madsen at (215) 327-1200.

Sincerely,



JLP/cah

cc: T. T. Martin, Administrator, Region I, USNRC
T. J. Kenny, USNRC Senior Resident Inspector, LGS