



PECO ENERGY

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Docket Nos. 50-277  
50-278  
License Nos. DPR-44  
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SUBJECT: Peach Bottom Atomic Power Station - Unit 2 & 3  
Special Report for a Valid Failure of the E-4 Emergency Diesel  
Generator on 9/24/94

REFERENCE: Peach Bottom Atomic Power Station Technical Specification  
(Tech Spec) 4.9.A.1.2.L and M

This Special Report is submitted pursuant to the requirements of Tech Spec 4.9.A.1.2.M. This Surveillance Requirement requires reporting of all Emergency Diesel Generator (EDG) failures, valid or non valid, within 30 days. This report is required to include the information recommended in Regulatory Position C.3.b of Regulatory Guide (RG) 1.108 "Periodic Testing of Diesel Generator Units as Onsite Electric Power System at Nuclear Power Plants", Revision 1, August 1977.

On 9/24/94 at 0943 hours with Unit 2 shutdown for a Refueling Outage and Unit 3 at approximately 100 % power, during the performance of a routine Surveillance Test (ST)-O-054-754-2 "E-42 4KV FUS UNDERVOLTAGE RELAYS FUNCTIONAL TEST AND E-42 AND E-424 ALTERNATE SHUTDOWN CONTROL FUNCTION TEST", the E-4 EDG Output Breaker (E-42) did not automatically close per its design. At 1035 hours, the necessary Tech Spec required surveillance requirements were satisfied. Troubleshooting was conducted which determined that the cause of the condition was a problem with the 4KV breaker. The breaker on the E-4 EDG was replaced with a spare. The E-42 breaker was then successfully tested at 1328 hours. The E-42 breaker was considered to be operable and the LCO was exited at 1350 hours. The cause of the event is due to the output breaker's failure to close per its design. Troubleshooting identified that a mechanical trip linkage, inside the breaker, was slow in resetting thus preventing the breaker from closing. Failure analysis performed on this breaker identified that the cause of the event was hardening of the grease on the mechanical trip linkage. This breaker is currently incorporated into the Preventive Maintenance (PM) program to replace the grease, however, the E-42 breaker failed

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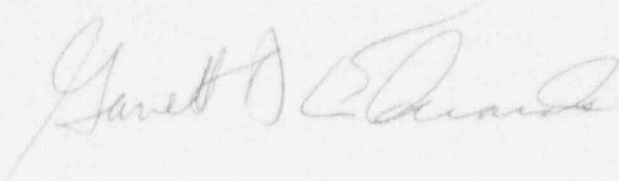
at the end of its PM period. Other breakers susceptible to this type concern are being addressed. In addition, an evaluation will be performed to identify a more reliable replacement grease and corrective actions will be implemented as appropriate pending the results of this evaluation.

The E-4 EDG failure was classified as a valid failure using the guidance of RG 1.108, Revision 1, 1977. Because this occurrence was classified as a valid failure and is the second valid failure in the last 20 valid tests, the current surveillance testing interval will be reduced to once per 7 days which is in conformance with RG 1.108, Revision 1, Section C.2.d.

The E-42 breaker was unable to supply power to its Unit 2 4kv bus for an undetermined amount of time. If a design bases Loss of Coolant Accident / Loss of Offsite Power condition occurred with the E-42 breaker unavailable to supply power to its Unit 2 4kv bus, the remaining EDGs and breakers were available and would have provided adequate AC power to safety related loads on both units.

If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,



GDE/GAJ:gaj

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