



SOUTHERN CALIFORNIA
EDISON

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U. S. Nuclear Regulatory Commission
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Subject: Docket Nos. 50-361 and 50-362
Diesel Generator Annual Report - 1995
San Onofre Nuclear Generating Station,
Units 2 and 3

The purpose of this letter is to provide the Emergency Diesel Generator Annual Report for 1995. This report is required by Technical Specifications 4.8.1.1.3 and 6.9.1 of Facility Licenses NPF-10 and NPF-15 for Units 2 and 3 respectively. The enclosure includes the information requested in Regulatory Position C.3.b of Regulatory Guide (RG) 1.108, as revised by Generic Letter (GL) 84-15, for the one valid test failure that occurred in 1995.

If you require any additional information, please let me know.

Sincerely,

J. L. Rainsberg for Walter C. Marsh

Walter C. Marsh
Manager of Nuclear Regulatory Affairs

Enclosure

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Emergency Diesel Generator Report
Southern California Edison Company
San Onofre Nuclear Generating Station
Units 2 and 3, Docket Nos. 50-361 and 50-362

Introduction

The following information is provided in accordance with Technical Specification Surveillance Requirement 4.8.1.1.3 and Regulatory Position C.3.b. of Regulatory Guide (RG) 1.108 as revised by Generic Letter (GL) 84-15. RG 1.108 requested information on seven items for each valid or invalid test failure.

Event Date: November 15, 1995

1. This event was a valid failure of the San Onofre Unit 3 Emergency Diesel Generator (EDG) 3G002.
2. This was the fourth failure in the last 100 valid tests.
3. The failure was caused by the improper time out of an agastat time delay relay. Relay K3, which blocks the low-low oil pressure trip during engine starts, timed out early unblocking the trip before oil pressure increased above the trip setpoint. The trip was unblocked 9 seconds after the EDG start signal vice the normal 50 seconds.

A root cause evaluation determined the most likely cause was a misadjusted set screw, set by the manufacturer, that prevented proper latching of the relay. This misadjustment caused the set screw to touch a plastic surface on the movable contact assembly during relay operation. This unintended contact limited the travel of the contact and caused wearing of the plastic component. Over time, particles worn from the plastic surface accumulated on the tip of the set screw further reducing the travel distance of the contact. This slow reduction in contact travel eventually affected the timing of the relay. The failed relay had been in service since April 1988.

4. The failed relay was replaced and tested. A satisfactory surveillance was performed on EDG following the repairs. The corresponding relays in the other EDGs were tested satisfactorily. A review of the San Onofre Maintenance Management System (SOMMS) and the NPRDS databases, did not identify any similar failures. The vendor was also unaware of any similar failures. Therefore, this is considered a random failure.
5. The EDG was unavailable for 12.7 hours as a result of this failure.
6. EDG 3G002 was in a 31 day testing mode during this time period.
7. The surveillance test interval was in accordance with the schedule of Technical Specification Table 4.8-1.