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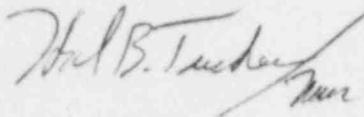
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U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: Catawba Nuclear Station, Unit 1
Docket No. 50-413
Revision to Special Report

Gentlemen:

Pursuant to Technical Specifications 4.8.1.1.3 and 6.9.2, please find attached Revision 1 to the Special Report concerning a Diesel Generator 1B valid failure on December 1, 1987. Changes to the original report, which was submitted to the NRC per my December 31, 1988 letter, are indicated by sidebars.

Very truly yours,



Hal B. Tucker

JGT/10006/sbn

Attachment

xc: Dr. J. Nelson Grace
Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
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SPECIAL REPORT, REVISION 1
CATAWBA NUCLEAR STATION, UNIT 1

DIESEL GENERATOR 1B
VALID FAILURE ON DECEMBER 1, 1987

On December 1, 1987 while performing Train B Engineering Safeguards Features (ESF) Testing, Unit 1 Diesel Generator (D/G) 1B was started automatically from the Unit 1 Control Room. After approximately 70 seconds the D/G tripped. This was the fifth Valid failure within the last 100 Valid starts of D/G 1B and the second in the last 20 starts. Consequently the testing interval was set at 7 days in accordance with Technical Specification 4.8.1.1.2. A work request was initiated to investigate the problem. The problem was found to be the P-3 shuttle valve not operating correctly. Repairs were completed on the shuttle valve and the D/G was tested satisfactory. Further investigation was conducted by Duke Power Design Engineering personnel and Transamerica Delaval, Incorporated, personnel in order to determine an appropriate replacement for the subject shuttle valve due to its repeated failures. It was decided that an OR gate, similar to the ones used on the Pneumatic Control Logic Board would perform the same function as the shuttle valve. The function of the shuttle valve is to enable a low low lube oil pressure trip and reset that trip during the start of the D/G. It was also determined that the OR Gate was a better design and more efficient component than the shuttle valve. Testing was conducted on D/G 1B using an OR Gate in place of the P-3 shuttle valve. It was found that the OR Gate operation was superior to the shuttle valve operation. A Nuclear Station Modification was written to install the OR gates in both Unit 1 and 2 D/Gs control panels at Catawba. Further test starts were conducted after implementation of the NSM on D/G 1B (before it was declared operable). At this time the OR gates have been installed on the Catawba D/Gs and no further indication of the tripping problem has been experienced.

The D/G was declared inoperable at 0200 hours on December 1, 1987, and was declared operable at 1230 hours on December 5, 1987. This is a total of 106 hours and 30 minutes. Because the Unit was in Mode 6, Refueling, Technical Specification 3.8.1.2, which has no time stipulations on returning an out of service D/G, was applicable. No Technical Specification Violations occurred as a result of this event.