

TENNESSEE VALLEY AUTHORITY

5N 157B Lookout Place

March 1, 1990

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of
Tennessee Valley Authority

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Docket Nos. 50-327
50-328

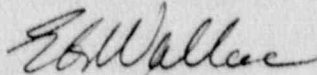
SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2 - DIESEL GENERATOR RELIABILITY DATA
REPORT

The enclosed report provides details concerning the 6.9-kilovolt diesel
generators installed at SQN. This report is being submitted in accordance
with Technical Specification 6.9.2.2.

Please direct questions concerning this issue to Bruce S. Schofield at
(615) 843-6172.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



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Enclosure

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ENCLOSURE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 DIESEL GENERATOR RELIABILITY DATA REPORT

This report is submitted pursuant to Technical Specification 6.9.2.2 to satisfy the requirement for a yearly data report on diesel generator (DG) reliability. The 6.9-kilovolt (kV) DGs at Sequoyah Nuclear Plant serve as the onsite Class 1E power source. Surveillance requirements of technical specifications that demonstrate DG operability are accomplished by the routine performance of Surveillance Instruction (SI) 7, "Electrical Power System: Diesel Generators Unit 0, 1, and 2," SI-7.1, "Diesel Generator AC Electrical Power Source Operability Verification (Diesel Generator/Offsite Source) - Units 1 and 2," the SI-26 series for loss of offsite power coincident with a safety injection, and the SI-102 series for the inspection of DGs. Listed below is a tabulation of DG testing data recorded during the performance of the aforementioned SIs as well as data recorded during the performance of special test instructions and special maintenance instructions. The data was taken from testing performed during the period between January 1, 1989, and December 31, 1989. "Valid tests" and "invalid tests" are defined in accordance with the criteria established in Regulatory Guide 1.108, Revision 1, August 1977.

<u>Diesel Generator</u>	<u>Valid Tests</u>	<u>Invalid Tests</u>	<u>Failures</u>
1A-A	15	43	0
1B-B	13	42	0
2A-A	15	45	0
2B-B	17	36	0

The above data of approximately 55 starts per DG with no recorded failures supports the conclusion that the reliable performance of the 6.9-kV DGs at Sequoyah provides a high confidence level the DGs will perform if required.

TVA recognizes the importance of reducing the number of DG starts and has received a requested change to technical specifications. Before the change, technical specifications required, in part, that the remaining DGs be demonstrated operable within one hour and every eight hours when a DG became inoperable. The recent change requires, in part, that the remaining DGs be demonstrated operable within 24 hours after a DG becomes inoperable. Based on this change, the number of starts per DG has been reduced from approximately 170 per year to approximately 55 per year. This change has greatly reduced the number of required starts of each 6.9-kV DG, thereby increasing engine life without compromising reliability.