

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

6N 38A Lookout Place

APR 11 1990

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

Gentlemen:

In the Matter of)
Tennessee Valley Authority)

Docket Nos. 50-327
50-328

SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 AND 2 - NRC INSPECTION REPORT NOS.
50-327, 328/90-02 - RESPONSE TO NOTICE OF VIOLATION (NOV) 90-02-02

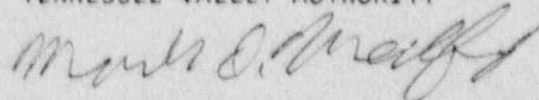
Enclosed is TVA's response to B. A. Wilson's letter to O. D. Kingsley, Jr.,
dated March 12, 1990, which transmitted the subject NOV.

Enclosure 1 provides TVA's response to the NOV. Summary statements of
commitments contained in this submittal are provided in Enclosure 2.

If you have any questions concerning this submittal, please telephone
M. A. Cooper at (615) 843-6651.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



Mark O. Medford, Vice President
Nuclear Technology and Licensing

Enclosures
cc: See page 2

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U.S. Nuclear Regulatory Commission

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cc (Enclosures):

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ENCLOSURE 1

RESPONSE TO NRC INSPECTION REPORT
NOS. 50-327/90-02 AND 50-328/90-02
B. A. WILSON'S LETTER TO O. D. KINGSLEY, JR.,
DATED MARCH 12, 1990

Violation 50-327, 328/90-02-02

"10 CFR 50, Appendix B, Criterion V, 'Instructions, Procedures and Drawings,' requires that activities affecting quality shall be prescribed by appropriate procedures and shall be accomplished in accordance with those procedures. In addition, the TVA Nuclear Quality Assurance Plan, TVA-NQA-PLN89, Revision 0, requires that mandatory controls be established to meet the requirements of ANSI N45.2.11-1974, Quality Assurance Requirements for the Design of Nuclear Power Plants. ANSI N45.2.11-1974 requires design basis documentation to be sufficient to trace the design back to its input and be such that it can be accessed and verified by competent reviewers without recourse to the original designer. Procedures NEP-3.1, Calculation, and NEP-3.2, Design Input, implement these requirements.

Contrary to the above, the technical justification for Engineering Change Notice L7242E, to demonstrate that an addition of 8.2 KW would have no adverse effect on emergency diesel generator loading, was not developed through a documented calculation as specified by procedures NEP-3.1 and NEP-3.2."

Admission or Denial of the Alleged Violation

TVA admits the violation.

Reason for the Violation

TVA Nuclear Engineering Procedure (NEP) 3.1, "Calculations," defines calculations as:

Computations and analyses applied to design input or output, for the purpose of developing or proving the design of structures, systems, or components; and to other engineering services performed for support of operations or maintenance. Calculations include computations and analyses performed in whole or in part on computers. Calculations may also encompass qualitative and quantitative analyses.

NEP-3.1 also allows the use of engineering judgement in the engineering process providing technical justification is documented in support of the design. The cause of this violation was that contrary to the requirements of NEP-3.1, the personnel preparing and approving the electrical input to Engineering Change Notice L7242E misapplied the use of the engineering judgement provision and believed the three considerations for using the fan motor's service factor (namely, motor insulation life, use of diesel generator load margin, and fan motor starting torque margin) could be appropriately addressed using technical justifications for the application of engineering judgement in lieu of performing a formal calculation.

Corrective Steps That Have Been Taken and Results Achieved

TVA has conducted a review of this issue and determined that the information contained in the technical justification is technically correct and that there is no safety significance associated with this issue. Therefore, a review of other technical justifications is not warranted.

Corrective Steps That Will Be Taken to Avoid Further Violations

TVA will revise the emergency diesel generator loading calculation to reflect the addition of the 8.2-kilowatt load by June 4, 1990. TVA will review and clarify the appropriate uses of engineering judgment and the requirements for preparing formal calculations with line engineering managers and specialists to ensure that changes to the facility that require calculations to be performed are conducted in accordance with site procedures. This action will be completed by June 1, 1990.

Date When Full Compliance Will Be Achieved

TVA is in full compliance.

ENCLOSURE 2
List of Commitments

1. TVA will revise the emergency diesel generator loading calculation to reflect the addition of the 8.2-kilowatt load by June 4, 1990.
2. TVA will review and clarify the appropriate uses of engineering judgment and the requirements for preparing formal calculations with line engineering managers and specialists to ensure that changes to the facility that require calculations to be performed are conducted in accordance with site procedures. This action will be completed by June 1, 1990.