

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

June 3, 1981

SQRD-50-328/81-28

Mr. James P. O'Reilly, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Region II - Suite 3100  
101 Marietta Street  
Atlanta, Georgia 30303



Dear Mr. O'Reilly:

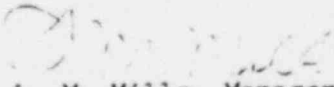
SEQUOYAH NUCLEAR PLANT UNIT 2 - ADDITIONAL LEVEL OF UNDER OR OVER VOLTAGE  
PROTECTION - SQRD-50-328/81-28 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector  
R. V. Crlenjak on April 3, 1981, in accordance with 10 CFR 50.55(e) as NCR  
SQN EEB 8114. An interim report was submitted on April 28, 1981. Enclosed  
is our second interim report. We expect to submit our next report by  
November 17, 1981.

If you have any questions, please get in touch with D. L. Lambert at  
FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

  
L. M. Mills, Manager  
Nuclear Regulation and Safety

Enclosure

cc: Mr. Victor Stello, Director (Enclosure)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

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ENCLOSURE  
SEQUOYAH NUCLEAR PLANT UNIT 2  
ADDITIONAL LEVEL OF UNDER OR OVER VOLTAGE PROTECTION  
SQRD-50-328/81-28  
10 CFR 50.55(e)  
SECOND INTERIM REPORT

Description of Deficiency

During a design review, it was determined that the present design of the additional level of under or over voltage protection does not fully comply with the time delay selection guidelines as stated in NRC Staff Position 1, "Degraded Grid Voltage Position." These guidelines state that the time delay selected shall: (1) not exceed the maximum time delay that is assumed in the FSAR accident analysis; and (2) minimize the effect of short duration voltage transients on the availability of the offsite power sources. The design basis for the present design was that an accident would not occur during the time delay. The time delay of 30 seconds was selected to satisfy item 2 above. Because of this 30 second delay, TVA's design exceeds the maximum safety response time of 22 seconds (as stated in the FSAR) required for mitigating an accident.

Interim Progress

As stated in the terms of the unit 1 operating license, TVA has committed to the implementation of degraded voltage relaying on the Class IE ac auxiliary power system by the end of unit 1 refueling outage.

TVA has completed its evaluation of the present design to determine what modifications are necessary to comply with NRC Staff Position 1. TVA expects to finalize the new design and submit technical specification changes incorporating the degraded voltage relaying design to NRC-NRR for review by late 1981.