TENNESSEE VALLEY AUTHORITY CHATTANOOGA, TENNESSEE 37401 02 NOV 24 A 8: 58 400 Chestnut Street Tower II November 19, 1982 BLRD-50-438/82-51 BLRD-50-439/82-46 U.S. Nuclear Regulatory Commission Region II Attn: Mr. James P. O'Reilly, Regional Administrator 101 Marietta Street, Suite 3100 Atlanta, Georgia 30303 Dear Mr. O'Reilly: BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - DEFICIENCY IN UNDERVOLTAGE

PROTECTION DURING AN ACCIDENT - BLRD-50-438/82-51, BLRD-50-439/82-46 -SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on July 27, 1982 in accordance with 10 CFR 50.55(e) as NCR BLN EEB 8205. This was followed by our first interim report dated August 25, 1982. Enclosed is our second interim report. We expect to submit our next report by January 19, 1983.

If you have any questions concerning this matter, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager Nuclear Licensing

Enclosure

cc: Mr. Richard C. DeYoung, Director (Enclosure) Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission Washington, D.C. 20555

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## ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
DEFICIENCY IN UNDERVOLTAGE PROTECTION DURING AN ACCIDENT
NCR BLN EEB 8205
BLRD-50-438/82-51, BLRD-50-439/82-46
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 overvoltage protection does not fully comply with the requirements as stated in Bellefonte Final Safety Analysis Report Question 430.38 and the guidelines in NRC branch technical position PSB-1. Misinterpretation of these requirements by TVA caused the present design not to consider a degraded voltage concurrent with an accident. Because of this misinterpretation, the time delay selected to initiate separation of the Class IE distribution system from the degraded offsite power system will not permit connection to the alternate or emergency power systems soon enough to ensure adequate voltages for the required safety-related motors.

## Interim Progress

TVA has revised its design criteria for the standby ac auxiliary power system (N4-RPD775A) in order to incorporate the design modifications necessary to satisfy the NRC branch technical position on degraded voltage protection. TVA is still analyzing the Class IE standby ac auxiliary power system to define the voltage and time-delay setpoints of the degraded voltage scheme.