## TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401 400 Chestnut Street Tower II

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PLRD-50-439/84-15

U.S. Nuclear Regulatory Commission Region II Attn: Mr. James P. O'Reilly, Regional Administrator 101 Marietta Street, NW, Suite 2900 Atlanta, Georgia 30323

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNIT 2 - DEFECTIVE AMPLIFIERS IN SAFETY-RELATED PANELS MANUFACTURED BY EL-TEX - BLRD-50-439/84-15 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector P. E. Fredrickson on February 14, 1984 in accordance with 10 CFR 50.55(e) as NCR 2815. This was followed by our interim report dated March 5, 1984. Enclosed is our second interim report. We expect to submit our next report by October 16, 1984.

If you have any questions, 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

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

Records Center (Enclosure)
Institute of Nuclear Power Operations
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BELLEFONTE NUCLEAR PLANT UNIT 2

DEFECTIVE AMPLIFIERS IN SAFETY-RELATED PANELS MANUFACTURED BY EL-TEX

BLRD-50-439/84-15

NCR 2815

10 CFR 50.55(e)

SECOND INTERIM REPORT

## Description of Deficiency

All DC isolation amplifiers in electrical panels 2EU-EDP-52A-E and 2EU-EDP-51A-E were found to be defective. These amplifiers are powered by a 125V AC supply, and send a 0-3 milliamp (ma) signal to the main control room indicators which show the status of the class 1E 125V DC power distribution system. This system provides power to various assential safety-related switches such as the 6.9 kV, 13.8 kV, and 480V switchgear.

The failure of the amplifiers has resulted in a wide open (i.e., maximum 3 ma) output to the indicators, regardless of the input signal. This results in erroneous indications in the control room on the status of the 125V DC system.

## Interim Progress

TVA is still evaluating this deficiency to determine what corrective actions will be taken. The defective amplifiers are being returned to the vendor (El-Tex Industries, Incorporated, Baltimore, Maryland) for analysis to determine the reason for failure. TVA will determine the necessary corrective action and action to prevent recurrence based on the results of this analysis.

TVA has also identified that similar components were received for use at TVA's Yellow Creek Nuclear Plant. TVA Quality Bulletin 84-09 has been issued to place this equipment in a "hold" status until resolution of this deficiency.