

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

March 19, 1982

BLRD-50-438/82-17
BLRD-50-439/82-16

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:

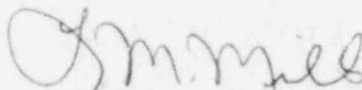
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - IMPROPER USE OF CIRCUIT BREAKERS
TO SHED NON-CLASS IE LOADS - BLRD-50-438/82-17, BLRD-50-439/82-16 - FIRST
INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
R. V. Crlenjak on February 19, 1982 in accordance with 10 CFR 50.55(e) as
NCR BLN EEB 8201. Enclosed is our first interim report. We expect to
submit our next report by June 24, 1982.

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 Regulation and Safety

Enclosure

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



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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
IMPROPER USE OF CIRCUIT BREAKERS TO SHED NON-CLASS IE LOADS
BLRD-50-438/82-17, BLRD-50-439/82-16
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

During an FSAR review it was discovered that the non-Class IE switchgear control power is derived from the 125V vital Class IE power system (EU). Isolation of the non-Class IE loads from the 125V Class IE power supply is provided by a series of coordinated fuses and circuit breakers. Isolation devices actuated only by fault currents are not considered to be isolation devices within the context of Regulatory Guide 1.75, "Physical Independence of Electrical Systems," RO, February 1974. Devices actuated by an accident signal are acceptable as isolators.

TVA Design Criteria N4-EU-D775 provided for the connection of the non-Class IE switchgear control power to the Class IE 125V dc boards. This design was accomplished subject to the development of a suitable isolator with the ability to isolate without interrupting the non-Class IE circuits. No such device is available at this time and, thus, the design relies on fuses and circuit breakers for isolation.

Interim Progress

TVA will take exception to Regulatory Guide 1.75 in this instance and will, by analysis, verify that the configuration is safe. The analysis will be documented and referenced in the FSAR and will demonstrate at least three fuse/breaker coordination levels that will prevent a malfunction (short circuit) in the non-Class IE circuits from causing unacceptable influences in the Class IE portion of the system.

The FSAR committed, with no exceptions, to full compliance with Regulatory Guide 1.75 and will be amended to document and provide justification for the exception taken.