

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

May 18, 1983

BLRD-50-438/82-33
BLRD-50-439/82-30

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - LACK OF ENVIRONMENTAL
QUALIFICATION OF EQUIPMENT IN AUXILIARY BUILDING BECAUSE OF POTENTIAL
FAILURE OF STARTUP AND RECIRCULATION SYSTEM - BLRD-50-438/82-33,
BLRD-50-439/82-30 - THIRD INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
R. V. Crlenjak on April 22, 1982 in accordance with 10 CFR 50.55(e) as
NCR BLN NEB 8203. This was followed by our interim reports dated May 24,
1982 and January 27, 1983. Enclosed is our third interim report. We
expect to submit our next report by February 17, 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
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

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
LACK OF ENVIRONMENTAL QUALIFICATION OF EQUIPMENT IN AUXILIARY BUILDING
BECAUSE OF POTENTIAL FAILURE OF STARTUP AND RECIRCULATION SYSTEM
BLRD-50-438/82-33, BLRD-50-439/82-30

10 CFR 50.55(e)
NCR BLN NEB 8203
THIRD INTERIM REPORT

Description of Deficiency

A pipe failure of the nonsafety grade Steam Generator Startup and Recirculation System in the Auxiliary Building could result in a harsh environment that exceeds the qualification limits for safety-related electrical equipment. Failure of nearby safety-related equipment in one system train because of the harsh environment caused by the pipe break coupled with an assumed failure in the same safety system in the other train may result in a situation that could adversely affect safe shutdown of the plant.

The cause of this deficiency was determined to be lack of sufficient pipe break analysis criteria at the time of system design. No other TVA facilities are affected by this deficiency.

Interim Progress

Design work relating to the system relocation/enclosure is continuing. The system design document, the design criteria drawings, and mechanical piping drawings have been revised to reflect the requirement that the startup and recirculation system piping in the auxiliary building be isolated from the building environment.

Still in progress is the revision to civil design drawings (concrete and steel) of the pipe chases and pump enclosures required to implement the piping isolation.