

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

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February 14, 1984

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:

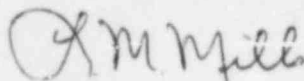
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - LACK OF ENVIRONMENTAL  
QUALIFICATION OF EQUIPMENT IN AUXILIARY BUILDING BECAUSE OF POTENTIAL  
FAILURE OF STARTUP AND RECIRCULATION SYSTEM - BLRD-50-438/82-33,  
BLRD-50-439/82-30 - FOURTH INTERIM REPORT

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 and May 18, 1983. Enclosed is our fourth interim  
report. We expect to submit our next report by June 3, 1985.

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

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  
FOURTH 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 criteria N4-50-D749, "General Design Criteria for Environmental Design," has been revised to address temperature and humidity consequences of pipe break. Proper use of this criteria should prevent a recurrence of this problem.

Revisions to civil design drawings (concrete and steel) of the pipe chases and pump enclosures required to implement necessary piping isolation are still in progress.