

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401  
400 Chestnut Street Tower II

September 19, 1984

34 SEP 24 P 1:44

BLRD-50-438/84-47  
BLRD-50-439/84-43

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:

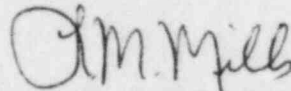
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - POTENTIAL FOR COOLER FAN FAILURE DUE TO  
UNDERSIZED THERMAL OVERLOAD RELAY HEATER ELEMENTS - BLRD-50-438/84-47,  
BLRD-50-439/84-43 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector  
P. E. Fredrickson on August 21, 1984 in accordance with 10 CFR 50.55(e) as  
NCR BLN EEB 8417. Enclosed is our first interim report. We expect to  
submit our next report on or about March 15, 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  
POTENTIAL FOR COOLER FAN FAILURE  
DUE TO UNDERSIZED THERMAL OVERLOAD RELAY HEATER ELEMENTS  
BLRD-50-438/84-47, BLRD-50-439/84-43  
10 CFR 50.55(e)  
NCR BLN EEB 8417  
FIRST INTERIM REPORT

Description of Deficiency

In nonconformance report (NCR) WBN NEB 8408 (WBRD-50-390/84-35, WBRD-50-391/84-31), TVA identified a deficiency at Watts Bar Nuclear Plant (WBN) in which three engineered safety feature (ESF) cooler fan motors failed to start during preoperational test W-3.1F (integrated safety injection (SI) and station blackout). The failure to start was attributed to in-line thermal overload relays which had tripped. This condition had previously occurred at WBN on preoperational test TVA-9C. The probable cause of these failures has been attributed to undersized thermal overload relay heater elements.

Since Bellefonte Nuclear Plant (BLN) uses the same motor control center (MCC) vendor (ITT-Gould) and uses the same vendor sizing criteria, there exists a potential for the same problem to occur at BLN.

Interim Progress

TVA is performing a design study to identify all heating, ventilating, and air-conditioning loads on shutdown boards at BLN. An evaluation of the thermal overload relay heater element sizing for the identified loads will be performed.