TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

June 15, 1984 84 JUN 20 P1:04

BLRD-50-438/83-54
BLRD-50-439/83-47

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 - CONTACT GAPS IN HFA RELAYS NOT ADJUSTED PROPERLY - BLRD-50-438/83-54, BLRD-50-439/83-47 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector Linda Watson on October 13, 1983 in accordance with 10 CFR 50.55(e) as NCR 2491. This was followed by our interim report dated November 4, 1983. Enclosed is our final report.

If you have any questions, please get in touch with R. H. Sheil at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

D S Kammer

for 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
CONTACT GAPS IN HFA RELAYS NOT ADJUSTED PROPERLY
BLRD-50-438/83-54, BLRD-50-439/83-47
NCR 2491
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

The 6.9 kV and the 13.8 kV class 1E switchgear at Bellefonte Nuclear Plant (BLN) utilize General Electric (GE) type HFA relays in various applications. TVA replaced the coils in these relays per GE service advice (SA) 721-PSM-152.2, dated November 21, 1980, and per th disposition of NCR BLN EEB 8101 (BLRD-50-438/81-37, BLRD-50-439/81-40). During replacement, the coil gap and wipe settings should have been adjusted per GE service manuals GEH-2024 and GEK 45484 for type HFA 51 and HFA 151 relays, respectively. The replacement procedure and contact gap and wipe settings were not documented at the time of replacement. Therefore, there is no way to assure that the settings for the affected relays are correct.

TVA has determined that this deficiency occurred because the contact gap and wipe setting values were not specified in GE service manual GEK 45484 at the time of replacement.

Safety Implications

GE has issued a service information letter (SIL) No. 44, Supplement 4, dated July 27, 1982, which identifies that a potential safety problem could exist due to misoperation of type HFA relays with improperly adjusted contact gap settings during a seismic event. This could prevent or degrade the proper operation of a class 1E system, and subsequently could adversely affect the safety of operations of the plant. This condition was also identified in NRC OIE Notice 83-19 and NRC-OIE Bulletin 84-02.

Corrective Action

TVA determined that the coils were replaced on 66 type HFA relays at BLN. All of these affected relays have been reinspected per GE SIL No. 44, Supplement 4, and six were found to require readjustment. The contact gap and wipe settings have been readjusted on those six relays per BLN work release Nos. 47083, 47084, 47086, 47087, and 47088.

To prevent recurrence of this problem, all affected Bellefonte Construction personnel have been instructed that when TVA's Division of Construction (CONST) receives modification instructions on class 1E equipment, an engineering evaluation must be made before performing the modification.