

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

35 APR 4 9:11
March 29, 1985

BLRD-50-438/83-62
BLRD-50-439/83-55

U.S. Nuclear Regulatory Commission
Region II
Attn: Dr. J. Nelson Grace, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Dr. Grace:

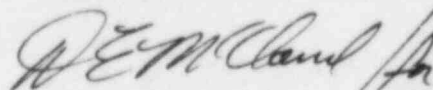
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - FUEL OIL-LINE RUPTURE IN
TRANSAMERICA DELAVAL, INC., GENERATORS - BLRD-50-438/83-62,
BLRD-50-439/83-55 - FINAL REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
P. E. Fredrickson on November 21, 1983 in accordance with 10 CFR 50.55(e)
as NCR BLN MEB 8303. This was followed by our interim reports dated
December 20, 1983, and April 6 and October 23, 1984. Enclosed is our final
report. We consider 10 CFR Part 21 applicable to this deficiency.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY



J. W. Hufham, Manager
Licensing and Regulations

Enclosure

cc: Mr. James Taylor, 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
FUEL OIL-LINE RUPTURE IN TRANSAMERICA DELAVAL, INC., GENERATORS
BLRD-50-438/83-62, BLRD-50-439/83-55
NCR BLN MEB 8303
10 CFR 50.55(e)
FINAL REPORT

Description of Deficiency

A potential problem has been identified concerning the fuel oil line from the engine-mounted fuel transfer pump to the engine fuel oil header on the standby diesel generators. Excessive engine vibration could possibly cause the fuel oil line to break, shut the engine down, and cause a fire. These generators were supplied to TVA by Transamerica Delaval, Incorporated (TDI), Oakland, California. TDI informed TVA of this potential problem in their letter dated September 30, 1983. TDI has also notified TVA that the generic cause of this deficiency was fuel line supports which had not been installed per the drawing requirements. Additionally, some TDI customers were not maintaining the equipment as required.

Safety Implications

The emergency diesel generators are necessary for the safe shutdown of the plant in the event of a loss of normal offsite power. Their failure due to fuel loss and/or fire damage could have adverse affects on the plant's ability to attain a safe shutdown condition.

Corrective Action

TVA will review the supports for the fuel line from the engine-driven fuel transfer pump to the engine fuel header for compliance with the configuration shown on TDI drawing No. 02-450-16. Any missing supports will be installed per TDI installation instructions. Any existing supports not shown on TDI drawing No. 02-450-16 will be removed. TVA will also install a shield between the fuel line and the turbocharger exhaust gas inlet to prevent fuel spray from a broken line from being ignited by the exhaust system.

TDI has notified TVA that a detailed inspection of fuel line supports will be performed and documented on future jobs before shipment. This will prevent recurrence of this deficiency.

All corrective actions for this deficiency will be completed by December 1, 1986.