

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

1630 Chestnut Street Tower II

July 9, 1985

BLRD-50-438/85-10

BLRD-50-439/85-10

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 - CRACKED WELDS ON TDI DIESEL
GENERATOR TURBOCHARGERS - BLRD-50-438/85-10 AND BLRD-50-439/85-10 -
SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
Al Ignatonis on March 18, 1985 in accordance with 10 CFR 50.55(e) as
NCR 4028. This was followed by our first interim report dated April 12,
1985. Enclosed is our second interim report. We expect to submit our
next report on or about January 10, 1986. 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. A. Dornier
J. W. Hufham, Manager

Licensing and Risk Protection

Enclosure

cc (Enclosure):

Mr. James Taylor, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
CRACKED WELDS ON TDI DIESEL GENERATOR TURBOCHARGERS
BLRD-50-438/85-10 AND BLRD-50-439/85-10
NCR 4028
10 CFR 50.55(e)
SECOND INTERIM REPORT

Description of Deficiency

Upon the recommendation of the TDI Diesel Generator Owners Group, TVA implemented an extensive inspection and maintenance program that revealed cracks in components that would not ordinarily require inspection. The four turbochargers installed on standby diesel generators 1A and 1B had cracks in the four 3/4-inch-long tack welds which attached the core plug to the turbine inlet nose piece which is a part of the turbocharger casing.

Interim Progress

A repair procedure has been implemented by TVA's Office of Construction (OC). This procedure was the recommended method of repair issued by Elliot Support Services and TVA's Office of Engineering (OE). The repair procedure entailed the removal of the defective tack welds by grinding, liquid penetrant testing of the weld removal area, and installation of a set screw between the core plug and turbine inlet nose piece. The set screw was staked to prevent it from backing out. This repair appears to have completed all required corrective action for the deficiency on three of the turbochargers. During liquid penetrant testing of the fourth turbocharger, cracks were found to extend into the turbocharger casing. TVA has returned this turbocharger to Elliott Support services for inspection. Preliminary inspection has not revealed the cause of the cracks and further inspections will be required. Destructive testing of the turbocharger casing is now being accomplished by Elliott Support Services to discover the cause of the cracks. We anticipate providing our next report on or about January 10, 1986.