

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

January 24, 1983

HTRD-50-518/83-01, -520/83-01  
BLRD-50-438/83-08, -439/83-05

U.S. Nuclear Regulatory Commission  
Region II

ATTN: James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE AND HARTSVILLE A NUCLEAR PLANTS - REPORTABLE DEFICIENCY -  
POTENTIAL DETERIORATION OF ISOPRENE GASKETS ON STANDBY DIESEL  
GENERATORS - HTRD-50-518/83-01, -520/83-01 - BLRD-50-438/83-08, -439/83-05

The subject deficiency was initially reported to NRC-OIE, Region II, Inspector Linda Watson on December 17, 1982, as NCRs BLN MEB 8203 and HTA MEB 8204. In accordance with paragraph 50.55(e) of 10 CFR Part 50, we have enclosed our first interim report for Hartsville and our final report for Bellefonte on the subject deficiency. We consider 10 CFR Part 21 applicable to this deficiency.

TVA has elected to defer construction activities for the Hartsville Nuclear Plant. Deferral does not mean that this project will be cancelled but that TVA is minimizing its expenditures and construction efforts until such time that TVA has sufficient information to indicate whether this project should be completed or cancelled. Therefore, we will not be submitting a final report for this nonconformance until a final decision is made regarding this project.

A one-week extension on the submittal of this report was discussed with and granted by NRC Inspector Ross Butcher on January 17, 1983.

If you have any questions, please call Jim Domer at FTS 858-2725 for BWRs and Ralph Shell at FTS 858-2676 for PWRs.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*D S Kammer*

for L. M. Mills, Manager  
Nuclear Licensing

Enclosure

cc: Mr. R. C. DeYoung, Director (Enclosure)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

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ENCLOSURE  
BELLEFONTE AND HARTSVILLE A NUCLEAR PLANTS  
POTENTIAL DETERIORATION OF ISOPRENE GASKETS ON STANDBY DIESEL GENERATORS  
10CFR50.55(e) FIRST INTERIM REPORT FOR HARTSVILLE PLANT A  
FINAL REPORT FOR BELLEFONTE  
NCRs BLN MEB 8209, HTA MEB 8204  
HTRD-50-518/83-01, -520/83-01  
BLRD-50-438/83-08, -549/83-05

Description of Deficiency

There exists a potential problem with the diesel generator governor drive coupling which could result in engine non-availability. The potential defect is related to the material used in the coupling drive element. The material, an isoprene, was designed for atmospheric use and is not suitable for use in the high-temperature, oil atmosphere encountered in the engine's gear case. The rubber deteriorates rapidly and ultimately fails. The diesels are supplied by Transamerica Delaval, Inc., (TDI) of Oakland, California, who notified the NRC of this defect under 10CFR21 by letter dated June 23, 1982, from L. L. Mills, Manager, Quality Engineering to the Director, Office of Inspection and Enforcement.

Safety Implications

Deterioration and subsequent failure of the isoprene gaskets could result in non-availability of the standby diesel generators which, under accident conditions, could adversely affect the safe shutdown of the plant.

Corrective Action

TDI has changed the material for the drive element to neoprene, a suitable material for the application. TDI has supplied the necessary replacement procedure, parts lists, and assembly drawings to TVA. All have been approved and accepted by TVA. Change out of the gaskets will be accomplished by replacing the governor drive coupling or the couplings flexible element and is scheduled for Bellefonte by February 18, 1983. Action on Hartsville A will be deferred until restart of design and construction.