TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

April 25, 1983

WBRD-50-390/83-17
WBRD-50-391/83-16

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - LOOSE MATERIAL IN STEAM GENERATOR - WBRD-50-390/83-17, WBRD-50-391/83-16 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector L. Watson on March 25, 1983 in accordance with 10 CFR 50.55(e) as NCR 4715. Enclosed is our first interim report. We expect to submit our next report on or about August 8, 1983.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

D S Kammer

for L. M. Mills, Manager
Nuclear Licensing

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

Records Center
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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PDR ADOCK 05000390
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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
LOOSE MATERIAL IN STEAM GENERATOR
NCR 4715
WBRD-50-390/83-17, WBRD-50-391/83-16
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

The Watts Bar Nuclear Plant (WBN) unit 1 steam generators were inspected for loose material based on information contained in the Institute of Nuclear Power Operations (INPO) Significant Operating Experience Report 82-12 dated November 23, 1982, which described steam generator tube ruptures at two non-TVA units. Loose material found on the secondary side of the steam generators was determined to be the cause of the ruptures. The INPO report also described the discovery of loose material in the secondary side of steam generators at four other non-TVA units.

During inspection of the WBN unit 1 steam generators before closure for filling operations, loose material of various sizes, shapes, and material types was observed between the outer tubes and the generator shell at the lower tube sheet. This inspection was performed with the aid of fiberoptics through the four 2-inch sludge lancing ports.

Interim Progress

All loose items and material readily determined to be detrimental have been removed from the unit 1 generators. Items removed and representative samples of remaining material such as metal shavings and corrosion products are being analyzed by Westinghouse for potential detrimental effects. This analysis will be evaluated by TVA for determining required corrective actions.

All secondary side openings on unit 1 have been closed and the generators are presently in wet layup.

The unit 2 generators are currently in dry layup and will be inspected before closure of the secondary side. The same nonconforming condition is suspected to exist for the unit 2 generators.