

TENNESSEE VALLEY AUTHORITY

USNRC REGION II  
CHATTANOOGA, TENNESSEE 37401  
ATLANTA, GEORGIA  
400 Chestnut Street Tower II

83 JUL 29 P 4: 07  
July 27, 1983

WBRD-50-390/83-41  
WBRD-50-391/83-41

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 - DIESEL GENERATOR REAR BEARING  
PROBLEM - WBRD-50-390/83-41, WBRD-50-391/83-41 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector  
Linda Watson on June 27, 1983 in accordance with 10 CFR 50.55(e) as  
NCR WBN W-125-P. Enclosed is our first interim report. We expect to  
submit our next report on or about September 30, 1983. 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

*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

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2  
DIESEL GENERATOR REAR BEARING PROBLEM

NCR W-125-P

WBRD-50-390/83-41, WBRD-50-391/83-41

10 CFR 50.55(e)

FIRST INTERIM REPORT

Description of Deficiency

During performance of test MI-82.1 on June 10, 1983, sparks were observed coming from the rear (sleeve) bearing of emergency diesel generator 2B-B (S/N 17401228). The cause of the sparks was apparently the shaft striking the outer oil seal.

The generators are manufactured by Parsons-Peebles Electric Products, Incorporated of Cleveland, Ohio.

Interim Progress

The failure was found to be wearing of the generator shaft insulation material under the inner race of the cylindrical roller bearing (2B-2 engine end of the generator). The wear allowed the shaft to drop down and rub the bearing inner and outer oil seals (bearing cover). The insulation wear was caused by the turning or slipping of the inner bearing race.

The generator has been replaced by a spare and was repaired at TVA's Power Service Shops located at Muscle Shoals, Alabama. The repairs consisted of rebuilding the oil seals; polishing the shaft under the oil seals; replacing the shaft insulation material under the bearing; and installing new bearings. The repaired generator will be used as a spare at WBN.

Investigation into root cause, action required to prevent recurrence, and generic implications is underway. TVA will supply more information in our next report on September 30, 1983.