TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

NRC REGION II
ATLANTA, GEORGIA

March 22, 1983

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WBRD-50-390/82-82
WBRD-50-391/82-78

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 - HEAT LOSS FROM POWER SYSTEMS DIESELS - WBRD-50-390/82-82, WBRD-50-391/82-78 - THIRD INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector R. V. Crlenjak on July 29, 1982 in accordance with 10 CFR 50.55(e) as NCR WBN NEB 8214. Interim reports were submitted on September 3 and December 7, 1982. Enclosed is our third interim report. We expect to submit our next report on or about July 8, 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

L. M. Mills

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

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
HEAT LOSS FROM POWER SYSTEMS DIESELS
NCR WBN NEB 8214
WBRD-50-390/82-82, WBRD-50-391/82-78
10 CFR 50.55(e)
THIRD INTERIM REPORT

Description of Deficiency

The original published data for the Power Systems (Rocky Mount, North Carolina) diesels gave the radiated heat loss of their engine at 1.37 Btu/hp-min. Power Systems has performed a heat load test, and their data indicates the radiated heat loss of the GM-EMB 16-645E4 diesel engine to be 3.82 Btu/hp-min ± 6 percent. The actual heat load measured for the diesels at Watts Bar Nuclear Plant (WBN) was 2.04 Btu/hp-min.

Interim Progress

Tests of the diesels were performed by TVA on November 30, 1982, and February 23, 1983. These tests confirmed that temperatures in the vicinity of safety-related equipment will exceed their qualification temperatures. TVA is in the process of determining what changes are necessary to reduce temperatures in localized areas or protect equipment from excessive heat. More information will be provided in our next report.