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

May 13, 1982

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USNRC REGION II
ATLANTA, GEORGIA

WBRD-50-390/82-36
WBRD-50-391/82-33

U.S. Nuclear Regulatory Commission
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - AMBIGUOUS OUTPUTS FROM BARTON PRESSURE TRANSMITTERS IN THE REACTOR COOLANT SYSTEM - WBRD-50-390/82-36, WBRD-50-391/82-33 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector D. Quick on April 9, 1982 in accordance with 10 CFR 50.55(e) as NCR WBN NEB 8208. Enclosed is our first interim report. The submittal date of this report was discussed with Inspector R. V. Crlenjak on May 11, 1982. We expect to submit our next report by July 19, 1982. 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, Manager
Nuclear Licensing

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

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
AMBIGUOUS OUTPUTS FROM BARTON PRESSURE TRANSMITTERS
IN THE REACTOR COOLANT SYSTEM
NCR WBN NEB 8208
WBRD-50-390/82-36, WBRD-50-391/82-33
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

Westinghouse Electric Corporation, Pittsburgh, Pennsylvania, recently completed a review of all requirements imposed on the reactor coolant system (RCS) wide range pressure instrumentation. As a result of their review, it was determined that the existing hardware does not meet all requirements. Postaccident inaccuracy of the instrumentation is such that it could result in inappropriate operator actions, in particular with respect to termination of safety injection (SI). This condition was also reported in a letter dated April 21, 1982, by Westinghouse to NRC-OIE Washington (Richard C. DeYoung).

Safety Implications

For the case of the main steam line break, failure by the operator to terminate SI at the proper time could result in overpressurization of the reactor vessel at low temperatures with attendant challenge to vessel integrity. Further, this could lead to the possibility that the pressurizer power operated relief valves may be lifted prior to termination of SI. This could result in a greater number of valve challenges, thus increasing the probability of a small loss-of-coolant accident due to the valve failing open. Conversely, early termination of safety injection could result in inadequate core cooling scenarios. Therefore, if left uncorrected, inaccurate indication of postaccident RCS pressure could have jeopardized the safe operation of the plant.

Interim Progress

Westinghouse is evaluating several possible corrective actions, such as relocation or addition of RCS wide range pressure transmitters outside containment. In addition, the Westinghouse Owners' Group procedures subcommittee met on April 29, 1982. As part of this meeting, safety injection termination requirements were reviewed.