TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401
5N 157B Lookout Place

AUG 14 1990

WBRD-50-390/85-35

10 CFR 50.55(e)

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of the Application of)
Tennessee Valley Authority)

Docket No. 50-390

WATTS BAR NUCLEAR PLANT (WBN) - INSTRUMENTATION BRANCH LINES THAT MAY NOT BE QUALIFIED - WBRD-50-390/85-35 - REVISED FINAL REPORT FOR UNIT 1

The subject deficiency for Unit 1 was initially reported to NRC Inspector Al Ignatonis on September 3, 1985, as Nonconforming Condition Report (NCR) WBN 6218. A final report was submitted on October 3, 1985. Enclosed is TVA's revised final report for WBN Unit 1.

Enclosure 2 provides a list of commitments made in this letter.

If there are any questions, please telephone P. L. Pace at (615) 365-8527.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

R. H. Shell

for E. G. Wallace, Manager
Nuclear Licensing and
Regulatory Affairs

Enclosures
cc: See page 2

9008200076 900814
PDR ADOCK 05000390
S PDC

IE27
1/1

U.S. Nuclear Regulatory Commission

AUG 14 1990

cc (Enclosures):
Ms. S. C. Black, Deputy Director
Project Directorate II-4
U.S. Nuclear Regulatory Commission
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852

INPO Record Center
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

NRC Resident Inspector
Watts Bar Nuclear Plant
P.O. Box 700
Spring City, Tennessee 37381

Mr. P. S. Tam, Senior Project Manager
U. S. Nuclear Regulatory Commission
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852

Mr. B. A. Wilson, Project Chief
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

ENCLOSURE 1

WATTS BAR NUCLEAR PLANT
NONCONFORMING CONDITION REPORT (NCR) WBN 6218
WBRD-50-390/85-35 - 10 CFR 50.55(e)

REVISED FINAL REPORT FOR UNIT 1

Description of Deficiency

TVA's Nuclear Engineering (NE) design output, which is used by Nuclear Construction (NC) to install seismic supports on instrument branch lines, in some cases was misinterpreted. This has resulted in some instrument branch lines being installed in a configuration which is not seismically qualified. The portion of some instrument lines between the process root valve connection and its associated field-routed instrument line and/or flexible hose assembly (1/2 to 3/4-inch pipe) has been installed with 6 inches to 2 feet more pipe than NE intended (per design drawings 47A051, 47A052, and 47B001).

This deficiency occurred as a result of NE's failure to provide the level of detail on the design drawings necessary for NC to correctly interpret and implement the seismic support requirements intended by the design drawings.

Safety Implications

Failure of these instrument lines during a safe shutdown earthquake could cause a loss of safety-related instrumentation that could adversely affect the safe operation of the plant.

Corrective Action

Corrective action has been completed for the WBN Unit 1 instrument lines included in the scope of TVA's evaluation of this deficiency that was completed in September 1985. However, insufficient documentation was maintained to ensure that all applicable instrument lines were evaluated. Therefore, a reevaluation will be performed for the instrument lines within the scope of the subject deficiency except those lines which have been or will be evaluated as part of other programs. The reevaluation will be complete by March 1991. Any instrument line modifications required by the reevaluation will be complete by July 1991.

NOTE: The corrective action described in TVA's final report for WBN Unit 1 dated October 3, 1985, contained a typographical error regarding the number of instrument lines evaluated (166) as a result of the subject deficiency. The scope of the evaluation was actually 566 instrument lines.

ENCLOSURE 2

LIST OF COMMITMENTS

1. A reevaluation will be performed for the instrument lines within the scope of the subject deficiency except those lines which have been or will be evaluated as part of other programs. The reevaluation will be complete by March 1991.

2. Any instrument line modification required by the reevaluation will be complete by July 1991.