TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

May 28, 1981

WBRD-50-390/81-44
WBRD-50-391/81-43

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 3100
101 Marietta Street
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - CVCS ANALYTICAL PIPING MODEL ERRORS
- WBRD-50-390/81-44 AND WBRD-50-391/81-43 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector
R. V. Crlenjak on April 28, 1981, in accordance with 10 CFR 50.55(e) as NCR
WBN CEB 8107. Enclosed is our first interim report. We expect to submit
our next report on or about July 29, 1981.

If you have any questions, please get in touch with D. L. Lambert at
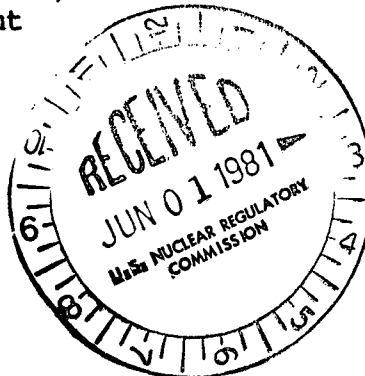FTS 857-2581.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

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

RECEIVED
JUN 0 1 1981
U.S. NUCLEAR REGULATORY
COMMISSION

B019
S
1/1

8106020462   S

ENCLOSURE
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
CVCS ANALYTICAL PIPING MODEL ERRORS
WBRD-50-390/81-44 AND WBRD-50-391/81-43
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

The present analytical model of piping problem N3-62-5A does not match the
piping design configuration. A portion of the piping system was modeled
with the wrong insulation weight. Various portions of the piping model
have geometry errors such as overlapping pipe members. The analysis errors
could produce unconservative stress results.

The piping model of problem N3-62-10A did not include valve weights. There
are seven valves in this piping problem. The omission of the valve weights
could produce unconservative stress results.

The piping problems are analytical computer models of portions of the
chemical and volume control system (CVCS). The analysis errors mentioned
above were discovered during an analysis review.

Interim Progress

TVA is presently reanalyzing these piping problems with the correct data.