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

March 24, 1986

WBRD-50-390/85-64
WBRD-50-391/85-60

U.S. Nuclear Regulatory Commission
Region II
Attention: Dr. J. Nelson Grace, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Dear Dr. Grace:

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2 - FAILURE TO IMPLEMENT DESIGN INSTRUCTIONS - WBRD-50-390/85-64, WBRD-50-391/85-60 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector Al Ignatonis on November 15, 1985 in accordance with 10 CFR 50.55(e) as NCR W-291-P. Our first interim report was submitted on December 30, 1985. We are unable at this time to provide the final report as promised in our letter dated February 14, 1986 which extended the due date of this report. Enclosed is our second interim report. We expect to submit our next report on or about May 2, 1986.

If there are any questions, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. A. Domer

R. L. Gridley
Manager of Licensing

Enclosure
cc: Mr. James Taylor, 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
FAILURE TO IMPLEMENT DESIGN INSTRUCTIONS
WBRD-50-390/85-64, WBRD-50-391/85-60
NCR W-291-P
10 CFR 50.55(e)

SECOND INTERIM REPORT

Description of Deficiency

During field inspections by TVA personnel, eight valves were identified as not being environmentally sealed at the interface points where conduit connects with the valves. The valves are 1-FCV-63-39A, 1-FCV-63-40B, 1-FCV-63-152A, 1-FCV-26-241B, 1-FCV-26-242A, 2-FCV-67-146A, 1-FSV-70-85-B, and 1-FSV-77-128A. These valves are installed in the Safety Injection, High Pressure Fire Protection, ERCW, Component Cooling, and Waste Disposal Systems. The sealing of the valve-conduit interface was called out in the notes of TVA drawings 45N824-4 and 45W826-10. However, due to an oversight, the sealing requirements were met for junction boxes and conduit but not for the equipment interface.

Safety Implications

These devices are required to be sealed in order to prevent the intrusion of moisture in the event of a noncritical pipe rupture and subsequent possible electrical shorts which could disable the devices. Failure of one or more of these devices could interfere with the respective safety-related system's ability to perform its designed safety function during an accident.

Interim Progress

TVA has identified all equipment for unit 1 which must be sealed in accordance with the above requirements. This equipment has been inspected, and it was found that approximately 164 out of 554 valve/conduit interface points requiring sealing were not sealed in accordance with the requirements. These points were then reworked under workplan N-W-291-P-1.

TVA is still in the process of determining the root cause of this deficiency.

To prevent a recurrence of this problem, engineers and craftsmen in the site's Nuclear Services Branch and in the Modifications Section have been trained in the requirements for the sealing of junction boxes, conduit, and equipment interfaces. Affected Office of Construction personnel will complete their training on this sealing by March 31, 1986. With regard to unit 2, TVA has determined that water entry sealing has not begun for this unit. Training with emphasis on the sealing of equipment in accordance with the notes of the referenced drawing will help to prevent a recurrence.

TVA will provide a final report on this matter by May 2, 1986.