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

March 29, 1983

WBRD-50-390/83-15
WBRD-50-391/83-14

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 - NEGATIVE PRESSURE IN CONTROL BUILDING MECHANICAL EQUIPMENT ROOM - WBRD-50-390/83-15, -391/83-14 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector P. Fredrickson on March 3, 1983 in accordance with 10 CFR 50.55(e) as NCR WBN SWP 8316. Enclosed is our first interim report. We expect to submit our next report on or about August 22, 1983.

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, D.C. 20555

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
NEGATIVE PRESSURE IN CONTROL BUILDING MECHANICAL EQUIPMENT ROOM
NCR WBN SWP 8316
WBRD-50-390/83-15, WBRD-50-391/83-14
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Deficiency

Design of the control building heating, ventilation, and air conditioning (HVAC) system does not provide for positive pressurization of the mechanical equipment room. Preop Test Deficiency PT-133, documented that a negative (-) pressure condition of 0.125 and 0.260 inches of H_2O were measured in this room while the HVAC system was operating in the normal and emergency modes, respectively. The FSAR, Sections 9.4.1 and 6.4 require that a positive pressure be maintained in the control building relative to the outdoor pressure to minimize air inleakage.

Interim Progress

Engineering change notice 3740 has been issued to modify the Main Control Room Habitability System HVAC ductwork so as to prevent a negative static pressure condition in the mechanical equipment room.

A return air inlet, which is located in the mechanical equipment room and commmon to both the operating and standby air handling units (AHU), will be eliminated. A new supply grille, with balancing damper, will be provided in the AHU's supply ductwork in the mechanical equipment room. This will ensure that the air distribution ratio of supply to return is such that a positive pressure is attainable.