400 Chestnut Street Tower II

June 11, 1982

Director of Nuclear Reactor Regulation
Attention: Ms. E. Adensam, Chief
Licensing Branch No. 4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Ms. Adensam:

In the Matter of the Application of	)	Docket Nos. 50-390
Tennessee Valley Authority	)	50-391

During a telephone conference call on May 18, 1982, the NRC requested clarification of TVA's compliance with General Design Criterion (GDC) 17 and 18 for Watts Bar Nuclear Plant.

The enclosed drawings show the locations of CSST A, B, C, and D and that CSST C and D meet the GDC 17 requirement for ". . .two physically independent circuits (not necessarily on separate rights of way) designed and located so as to minimize to the extent practicable the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions."

Watts Bar Hydro Project drawing 75N200 (FSAR figure 8.2-4) is included to show that 161 kV lines leaving the Watts Bar switchyard meet GDC 17. Watts Bar Nuclear Plant drawing 75W200 (FSAR figure 8.2-3) is included to show the location of CSST C and D.

The following additional Watts Bar Nuclear Plant drawings (75W802-7,8 and 45W880-4A) are included to show the locations of CSST C and D and their associated switchgear (C and D) and the routing of the alternate (preferred) circuits 1 and 2 from the switchgear to the turbine building wall.

Drawing 75W802-7 shows a plan view of CSST C and D and a conduit bank from the transformer to a cable vault. Drawing 75W802-8 is a detail view of CSST C and D and their associated switchgear.

B001
1/A 58th drawing

Drawings
10: Pm

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Drawing 45W880-4A shows the routing of the alternate (preferred) circuits from the cable vault to the turbine building wall. Referring to plan EL 728, the alternate (preferred) 1 circuits are routed in the top raceways to the turbine building wall through the wall and then via raceways through the turbine building to the shutdown boards in the auxiliary building. Alternate (preferred) 2 circuits are routed in the lower raceways to the exterior of the turbine building wall, then north along the wall, across the top of the control building and then enter the top of the auxiliary building and drop down to the shutdown boards.

The routing of the alternate (preferred) circuits is such that the simultaneous failure of both circuits is minimized (GDC 17).

If you have any questions concerning this matter, please get in touch with D. P. Ormsby at FTS 858-2682.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Licensing

Sworn to and subscribed before me
this 11th day of June 1982

Notary Public
My Commission Expires 9-5-84

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