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

November 22, 1983

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

Dear Ms. Adensam:

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

NUREG-0737, item II.F.1 states that all potential accident release paths should be monitored to detect and measure concentrations of noble gas fission products in plant gaseous effluents during and following an accident. Based upon the technical basis provided in the enclosure to this letter, TVA requests that an exemption be granted for not providing high-range noble gas monitors on the Auxiliary Building vent.

We request that this matter be reviewed expeditiously and a meeting be scheduled as soon as practical to allow for more detailed discussions, if necessary.

If you have any questions concerning this matter, please get in touch with D. B. Ellis at FTS 858-2681.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Licensing

Sworn to and subscribed before me
this 22nd day of November 1983
Paulette D. White
Notary Public
My Commission Expires 9-5-84

Enclosure
cc: U.S. Nuclear Regulatory Commission (Enclosure)
Region II
Attn: Mr. James P. O'Reilly, Regional Administrator
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

B001
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ENCLOSURE
WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
NUREG-0737 ITEM II.F.1
REQUEST FOR EXEMPTION TO INSTALL HIGH-RANGE NOBLE GAS MONITORS
ON THE AUXILIARY BUILDING VENT

The gaseous effluent monitoring system for the Watts Bar Nuclear Plant does not include a high-range monitor for the Auxiliary Building vent, since the release is diverted to the Shield Building vent for design basis accidents. Auxiliary Building vent isolation and operation of the Auxiliary Building Gas Treatment System (ABGTS), an engineered safety feature, provide the required high-range postaccident monitoring capability for the Auxiliary Building postaccident release path.

Upon receipt of a Phase A containment isolation signal, or a high radiation signal in the fuel handling area, or a high radiation signal from the Auxiliary Building exhaust vent monitor, the Auxiliary Building vent is isolated and the ABGTS establishes a reduced pressure region in the Auxiliary Building. Each independent ABGTS train exhausts Auxiliary Building air through the associated Shield Building vent. The Shield Building vent is equipped with a high-range gaseous effluent radiation monitor that meets NUREG-0737 and Regulatory Guide 1.97, revision 2, requirements.

With the exception of the Auxiliary Building vent monitor channel, the Auxiliary Building isolation and ABGTS start-up signals are provided by trained, redundant instrumentation. There is no design basis accident for which the Auxiliary Building vent monitor is required to provide an isolation signal, and thus, need not be redundant. It is thus clear that provisions for initiating Auxiliary Building isolation and measuring the Auxiliary Building radioactive release with the Shield Building vent high-range monitor meet the intent of NUREG-0737.