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

February 25, 1985

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

Please refer to TVA's letters dated September 14 and October 29, 1981 which provided TVA's initial and revised responses, respectively, to NUREG-0737.

Included in the referenced submittals was TVA's response and revised response, respectively, to NUREG-0737 item II.E.4.2. Enclosed is TVA's latest response to position 2 of NUREG-0737 item II.E.4.2 regarding the classification of essential and nonessential systems. This revision is being submitted to identify the postaccident sampling system as an essential system.

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

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. W. Hufham, Manager
Licensing and Regulations

Sworn to and subscribed before me
this 25th day of February 1985.

Bryant M. Lowery
Notary Public

My Commission Expires 4/8/86

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

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ENCLOSURE

WATTS BAR NUCLEAR PLANT
REVISED RESPONSE TO NUREG-0737 ITEM II.E.4.2 POSITION 2
CONCERNING THE CLASSIFICATION OF ESSENTIAL AND NONESSENTIAL SYSTEMS

2. A study was undertaken by TVA to (a) examine each system which penetrates the containment, (b) determine whether or not it is essential, (c) describe basis for this determination, (d) modify design if required.

Every system that penetrates containment has been reevaluated to determine if it should be classified as essential or nonessential. The current classifications have been found to be acceptable, and no changes in classification are planned.

The containment isolation system is designed to prevent the release of radioactive material to the environment after an accident while ensuring that systems important for postaccident mitigation are operational. Table II.E.4.2-1 shows the different isolation signals and the parameters that initiate each signal.

Isolation is provided on the following three levels:

1. Nonessential systems - These systems are not required for postaccident mitigation. They are isolated automatically upon receipt of a Phase A isolation signal and, except for some instrument lines, have two isolation barriers as required by the GDC. Manual isolation valves are sealed closed as required by S.R.P. 6.2.4.

2. Essential systems - This group consists of the emergency core cooling systems, the containment spray system, and postaccident H#2 monitors and postaccident sampling system. These systems are not automatically isolated in the event of an accident. Remote manual valves are provided to permit isolation of these lines from the main control room if necessary.

3. Desirable sysems - Systems that, while not required, significantly increase the plant's ability to cope with a small steam line break or LOCA. The systems are isolated automatically upon the receipt of a Phase B isolation signal (Table 1). The systems falling into this category are emergency raw cooling water to the reactor coolant pumps (RCP) and containment coolers, component cooling water to the RCPs and control air.

Each line penetrating primary containment has been reviewed to ensure that (1) isolation of the line was based on its need to be in service postaccident and (2) that each containment isolation valve received the proper isolation signal.