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

April 13, 1982

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Denton:

In the Matter of the	)	Docket Nos. 50-259
Tennessee Valley Authority	)	50-260
		50-296

By letter from J. E. Gilleland to J. P. O'Reilly dated April 24, 1979 and my letter to T. A. Ippolito dated August 6, 1979, TVA responded to item 6 of OIE Bulletin 79-08 for Browns Ferry Nuclear Plant. My letter to H. R. Denton dated December 23, 1980 provided TVA's response to NUREG-0737 item I.C.6. Enclosed are revised responses to these items which clarify our policy regarding critical safety systems and component status control.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Regulation and Safety

Subscribed and sworn to before
me this 13th day of April 1982.

Paulette H. White
Notary Public

My Commission Expires 9-5-84

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

ENCLOSURE

REVISED RESPONSE TO
OIE BULLETIN 79-08
AND
NUREG-0737, ITEM I.C.6

BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
DOCKET NOS. 50-259, -260, -296

INITIAL RESPONSE TO ITEM 6 OF BULLETIN 79-08
(J. P. O'Reilly's letter to N. B. Hughes dated April 14, 1979)

6. Review all safety-related valve positions, positioning requirements, and positive controls to ensure that valves remain positioned (open or closed) in a manner to ensure the proper operation of engineered safety features. Also, review related procedures such as those for maintenance, testing, plant and system startup, and supervisory periodic (e.g., daily/shift checks) surveillance to ensure that such valves are returned to their correct positions following necessary manipulations and are maintained in their positions during all operational modes.

Response to Question 6

Plant administrative procedures require that (a) all critical safety system and component (CSSC) alignment is verified before unit startup, (b) changes in the alignment of any CSSC that is required to be operational are recorded on a system status sheet, (c) shift empoyees being relieved communicate information on any abnormal plant conditions including temporary conditions.

Plant operating instructions require completion of a prestartup checklist before unit startup. This checklist is used to verify correct alignment of all safety systems. On a weekly basis, system alignment is reviewed. Anytime a component is changed from its normal position or condition, if required to be operational, a system status sheet is completed and placed in a system status folder. When removed from service and operability is not required, the status of all safety-related systems (CSSC) will be maintained or a complete valve checklist will be verified and required surveillance checks run before returning to operable status. In addition, panel checklists are reviewed weekly to verify that flow paths exist for all safety systems. A safety system status display panel is located in the main control room. The purpose of this panel is to display a specific plant parameter selected by the unit operator.

Return of a system or system component to its normal mode or position following maintenance or testing is addressed in the response to question 8.

RESPONSE TO REQUEST FOR CLARIFICATION
OF ITEM 6 OF BULLETIN 79-08

Item No. 6

1. It is not clear from your response that safety-related valve positioning requirements were reviewed to ensure proper operation of engineered safety features. Please supplement your response to provide a commitment to conduct this review and a schedule for completion.

2. Please augment your response to indicate the extent to which position and locking device checks are performed for locked safety system valves.

3. Your response did not clearly indicate that all accessible safety-related valves had been inspected to verify proper position nor was a schedule for performing the position verification for all safety-related valves provided. Please supplement your response to provide this information.

Response to Item No. 6

1. Safety-related valve position requirements have been reviewed to ensure proper operation of engineered safety features. This review has been completed.

2. CSSC valve position requirements are listed and documented in the operating instruction valve checklist for each individual system. The complete system valve checklist is done before startup following each refueling outage and placed in the system status files. Locked safety system valves are included on the checklists during all operational modes when system operability is required. If the position of any locked valve is to be changed, an "abnormal status" form is filled out and placed in the status file for the appropriate system. The form states the normal and abnormal condition and the reason for the abnormal status. Should this change render the system or component inoperable, further action is as outlined in item 8 of our August 6, 1979 letter. When the locked valve is returned to the normal position, the abnormal status sheet is removed from the file. The file is reviewed for completeness and abnormal status by a weekly status review procedure. Major flow path valves for each system are checked weekly on a separate panel checklist for proper position.

3. Accessible safety-related valves in the main flow path of CSSC equipment have been inspected to verify proper positioning. This verification is performed by a weekly status review procedure.

I.C.6 - VERIFY CORRECT PERFORMANCE OF OPERATING ACTIVITIES

As a result of Three Mile Island, TVA has reviewed and revised our procedures in the area of equipment control. TVA currently controls equipment in accordance with paragraph 5.2.6 of ANSI N18.7 (1976). We will provide detailed comments to the proposed new revision to Regulatory Guide 1.33 when such comments are formally solicited. In general, our means of compliance with the five supplemental requirements to be included in the revision of Regulatory Guide 1.33 are as follows.

1. All equipment that is required to be operational is controlled in accordance with paragraph 5.2.6 of ANSI N18.7-1972 (1976 rev.) regardless of why the equipment status is changed. This includes equipment removed from service for surveillance tests.

2. TVA clearance procedures require all equipment to be released from service to be authorized by an SRO. Troubleshooting or minor repairs may be authorized by the RO. Routine surveillance testing is authorized by the RO and is performed in accordance with approved checklists and procedures. The SRO is kept informed of activities on the unit by the RO.

3. TVA has reviewed its equipment control measures and determined that where necessary a second qualified person verifies correct implementation. These include verification of locked valve positions in safety systems and temporary alterations. Other procedures require extensive checklists and interaction with other staff employees. These include systems checklists, shift turnover, unit prestart, and panel checklists. Procedures to disable safety-related equipment for maintenance are implemented by an SRO and require that each component involved in a clearance be written out on the clearance sheet. This sheet is reviewed by the shift engineer before the clearance is issued. Each card used to identify a component in the clearance is accounted for. Limiting conditions for operation require redundant systems be tested while a component is removed from service. Following maintenance, safety-related equipment is tested to ensure satisfactory performance before being declared operable.

4. Equipment status is not changed without approval of the RO.

5. Plant operating instructions require completion of a startup checklist before unit startup. This checklist is used to verify correct alignment of all safety systems. In addition, alignment of critical systems is reviewed each shift. Anytime a critical component is changed from its normal position or condition, if required to be operational, a system status sheet is completed and placed in a system status folder. Panel checklists are reviewed each shift to verify proper panel alignment exists for all safety systems.

   Second verification of system alignment is provided where needed. It is TVA's opinion that this verification function can be performed adequately by an assistant unit operator (AUO) and that the use of licensed unit operators is not necessary. The AUO has sufficient training and familiarity with plant systems to ensure correct system alignment, and this policy will allow the licensed operator to remain in the control room.

In summary, we believe that our procedures for control of equipment are fully adequate and meet the intent of the supplemental requirements.