



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

MAY 14 1991

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

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

BROWNS FERRY NUCLEAR PLANT (BFN) - AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) SECTION XI - PUMP AND VALVE TESTING (P&VT) PROGRAM, CHANGES AND CLARIFICATIONS

Reference 1: "BFN - American Society of Mechanical Engineers (ASME) Section XI - Pump and Valve Testing Program (TAC Nos. 11324, 11325, 11326)"

2: Generic Letter No. 89-04 dated April 3, 1989, NRC's Guidance for Developing an Acceptable In-service Testing Program

Enclosed are changes and clarifications to TVA's pump and valve program which was submitted by Reference 1. Based on technical discussions with NRC program reviewers and TVA personnel there were three areas identified in the program submittal which needed to be changed. The following is a list of the changes:

1. Relief Request No. PV-23 has been revised to more clearly indicate the basis for the request and to better explain the alternate testing proposed is in accordance with Reference 2.
2. The revised Cold Shutdown Justification No. 7 is being revised to better describe the testing of the main steam isolation valves. Relief Request No. PV-35 is being submitted for the fail-safe testing of the inboard MSIV's.
3. Cold Shutdown Justification No. 12 is being withdrawn. The control air drywell isolation valves will be tested quarterly as required by the ASME code.

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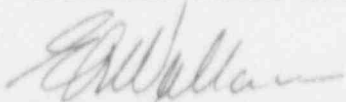
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The above changes resolve the NRC review comments. There are no commitments contained in this letter.

If you have any questions, please telephone Patrick P. Carrier, BFN, (205) 729-3570.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



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System: Main Steam (1)

Drawing: 47ES01-1

Valves: FCV-1-14, 26, 37, 51

Class: 1

Function: Main Steam Isolation Valve Inboard of Primary Containment

Impractical Test Requirement: Fail-safe position testing of valves once each quarter or on a cold shutdown basis.

Basis for Relief: The fail-safe testing of these main steam isolation valves (MSIVs) requires the isolation of control air to the valve operator and the venting of the control air accumulator for the valve. The MSIV, the control air isolation valve, and accumulator are located inside primary containment. This test would require a primary containment entry, which is precluded during operation because the containment atmosphere is inerted with nitrogen gas for oxygen control. In addition, the inert atmosphere is maintained during short duration cold shutdown periods when entry into containment is not mandatory.

The extended downtime and the cost required to purge the containment vessel to allow entry for the test and to re-inert the vessel prior to restart place an operational and financial hardship on the utility without a commensurate increase in safety.

Alternative Testing: The fail-safe function of these valves will be tested at each cold shutdown during which the containment vessel atmosphere does not remain inerted, provided they have not been tested within the previous three months. Should the containment vessel atmosphere remain inerted for an entire fuel cycle, these valves will be tested at a minimum of once each refueling outage.

System: Control Rod Drive Hydraulic (85)
Drawing: 47E820-2, 47E820-5 (U2), and 47E820-6 (U1&3)

	<u>Category</u>
Valves:	
FCV-85-39A (1-185)	B
FCV-85-39B (1-185)	B
FCV-85-589 (1-185)	C
FCV-85-597 (1-185)	C
FCV-85-616 (1-185)	C
FCV-85-617 (1-185)	C

Class: <

Function: Control Rod Scram Water Flow Path

Impractical Test

Requirement: Exercise once every three months and measure stroke times.

Basis for Relief: These valves located on the hydraulic control units for the 185 control rod drives function on a reactor signal from the reactor protection system to insert the control rods rapidly into the reactor core.

Cycling these valves requires scrambling a control rod. There are 185 control rods in the reactor. Scramming every rod once every three months is not practical for the following reasons:

- a. A power reduction is required to test the scram function. Reducing power for the length of time required to scram 185 rods is not practical.
- b. Fuel preconditioning must follow this power reduction to avoid possible fuel damage. The longer the reduction in power, the longer the preconditioning.

Their proper functioning is most practically verified by an actual scram test (except for closure of 85-589). The closure of 85-589 is demonstrated in a special test which verifies that the CRD accumulators maintain pressure after the CRD pumps have been stopped.

Alternative
Testing:

1. Scram testing and rod insertion timing will be performed in accordance with Technical Specifications Section 4.3.C (at reactor coolant pressure 800 psig) for:
 - a. All control rods prior to thermal power exceeding 40 percent after each refueling outage.

b. 10 percent on a rotating basis at least once every 16 weeks.

2. Scram charging water check valve (85-589) closure test - each refueling outage.

This alternate testing is consistent with NRC staff position No. 7 in Generic Letter 89-04, "Guidance on Developing Acceptable Inservice Testing Programs."

COLD SHUTDOWN JUSTIFICATION NUMBER 7

System: Main Steam

Drawing: 47W801-1

Valves: 1-14, 15, 26, 27, 37, 38, 51, 52

Category: A

Class: 1

Function: Main Steam Isolation

Justification: Cycling of these valves during power operation requires a reduction in power to less than 70 percent of full power. Per IWV-3412(a), valves shall be exercised unless such operation is not practical during plant operation. Valves will be partially stroked quarterly, and full stroked on a cold shutdown basis. The valves located outside primary containment, 1-15, 27, 38, and 52, will be fail-safe tested on a cold shutdown basis.