

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8511260320 DOC. DATE: 85/11/20 NOTARIZED: YES DOCKET #
 FACILITY: 50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250
 50-260 Browns Ferry Nuclear Power Station, Unit 2, Tennessee 05000260
 50-296 Browns Ferry Nuclear Power Station, Unit 3, Tennessee 05000296

AUTH. NAME: AUTHOR AFFILIATION
 HOFHAM, J.W. Tennessee Valley Authority
 RECIP. NAME: RECIPIENT AFFILIATION
 VASSALLO, D.B. Operating Reactors Branch 2

SUBJECT: Forward requests for temporary exemption from App J
 testing of reactor bldg. closed cooling water valves.
 Exemptions requested to accommodate schedule requirements.
 Approval by 860219 requested.

DISTRIBUTION CODE: A017D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 8
 TITLE: OR Submittal: Append J: Containment Leak Rate Testing

NOTES: 05000250
 OL: 07/19/72
 NMSS/FCAF. 1cy. 1cy NMSS/FCAF/PM. 05000260
 OL: 06/28/74
 NMSS/FCAF. 1cy. 1cy NMSS/FCAF/PM. 05000296
 OL: 07/02/76

	RECIPIENT ID CODE/NAME	COPIES LTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTR ENCL
	PWR-A PD2 PD 01	5 5	BWR PD2 PD 01	5 5
INTERNAL:	ACRS 07	10 10	ADM/LFMB	1 0
	ELD/HDS4 08	1 1	NRR BWR ADTS	1 1
	NRR PWR-A ADTS	1 1	NRR PWR-B ADTS	1 1
	NRR/DSRO DIR	1 1	REG FILE 04	1 1
	RG2	1 1		
EXTERNAL:	24X	1 1	LPDR 03	2 2
	NRC PDR 02	1 1	NSIC 05	1 1
NOTES:		2 2		

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

5N 157B Lookout Place

November 20, 1985

Director of Nuclear Reactor Regulation
Attention: Mr. Domenic B. Vassallo, Chief
Operating Reactor Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Vassallo:

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

An internal review of the 10 CFR 50 Appendix J testing program for Browns Ferry Nuclear Plant (BFN), has identified several exceptions to Appendix J requirements. These exceptions were submitted to NRC in a letter to you dated May 10, 1985 and discussed in a subsequent meeting with the NRC staff on August 28, 1985. As discussed in that meeting, we are requesting the enclosed temporary exemptions to Appendix J requirements as they apply to certain of these identified exceptions for Browns Ferry unit 2. The exemptions are requested for one cycle of operation.

Our request for exemption relating to Appendix J testing of the Reactor Building Closed Cooling Water (RBCCW) valves, submitted October 10, 1975, was denied by NRC in a letter dated October 24, 1984. We are planning to perform the necessary testing. However, the enclosure requests a temporary exemption to Appendix J requirements for testing the affected RBCCW valves.

The enclosed exemptions are being requested in order to accommodate schedule requirements for designing, material procurement, and installation of the modifications necessary to perform testing. The enclosed justifications demonstrate that the requested temporary exemptions of the subject valves, valve bonnets, and orifice flanges until the unit 2 cycle 6 refueling outage, do not pose any undue risk to public health and safety.

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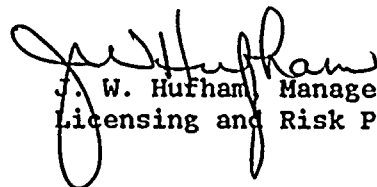
Director of Nuclear Reactor Regulation

November 20, 1985


Approval of the requested exemptions is needed by February 19, 1986. Approval of the exemptions is needed before starting the integrated testing, which is scheduled for late February.

Very truly yours,

TENNESSEE VALLEY AUTHORITY


J. W. Hufham, Manager
Licensing and Risk Protection

Subscribed and sworn to before
me on this 20th day of Nov. 1985.


Notary Public

My Commission Expires 8-24-88

Enclosure

cc (Enclosure):

Mr. R. J. Clark
U.S. Nuclear Regulatory Commission
Browns Ferry Project Manager
7920 Norfolk Avenue
Bethesda, Maryland 20814

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



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Enclosure

Request for Temporary Exemptions from
10 CFR 50 Appendix J, Requirements for
Browns Ferry Nuclear Plant - Unit 2

I. Valve Bonnet and Orifice Flange Testing

TVA requests exemption to 10 CFR 50, Appendix J, paragraph III.D.2 (Type B Tests) for the following valve bonnets and orifice flanges, which form part of the water sealed containment boundary. This exemption is requested until the unit 2 cycle 6 refueling outage.

A. Hand Control Valve Bonnet 12-742

This is a two-inch auxiliary boiler valve located inboard of the primary containment isolation valves in the piping which connects the auxiliary boiler system to the torus via the Reactor Core Isolation Cooling (RCIC) pump miniflow line. This valve is not a primary containment isolation valve; however, the valve bonnet forms part of the primary containment boundary.

B. Flow Control Valve Bonnet 71-34

This is a two-inch RCIC system inboard primary containment isolation valve located in the RCIC pump miniflow line which discharges to the suppression pool. This is the same RCIC line discussed in item I.A above.

C. RCIC Orifice Flange

The RCIC orifice flange is located in the RCIC pump miniflow line inboard of the primary containment isolation valves. This orifice flange forms part of the primary containment boundary. This is the same RCIC line discussed in item I.A and I.B above.

Enclosure
(Continued)

I. Valve Bonnet and Orifice Flange Testing (Continued)

D. Flow Control Valve Bonnet 73-30

This is a four-inch High Pressure Coolant Injection (HPCI) system inboard primary containment isolation valve located in the HPCI pump miniflow line which discharges to the suppression pool.

Justification

The above valve bonnets and orifice flanges are not currently testable (type B test). Block valves, test connections, vents, and drains must be installed to allow local leak testing in accordance with Appendix J. Because these testing requirements were identified during the current unit 2 outage, there is insufficient time available to procure materials, prepare design changes, and implement the necessary modifications without impacting the unit 2 outage schedule.

Safety Analysis

Each of the above components are primary containment boundaries associated with lines that terminate below the suppression pool water level. They are, therefore, water sealed and isolated from the containment atmosphere post accident. During the requested exemption period, the following considerations provide a high degree of assurance that containment leakage limits will not be exceeded post accident by compensating for the exempted testing requirements. All of the exempted components are within the type A test boundary, and will be type A tested during the current refueling outage. They will not be disassembled again until type B testing can be

Enclosure
(Continued)

I. Valve Bonnet and Orifice Flange Testing (Continued)

Safety Analysis (Continued)

performed. Finally, review of past test data indicates that the exempted boundaries have not exhibited leakage during type A tests. Therefore, granting the requested exemptions will not adversely affect the public health and safety.

II. Reverse Flow Testing of Spring Operated Globe Valves

TVA requests exemption to 10 CFR 50, Appendix J, paragraph III.C.1 (Type C Tests - Test Methods) for the Containment Atmospheric Dilution (CAD) system primary containment isolation valves 84-8A/8B/8C/8D (two inch). These valves are part of the primary containment boundary and are open to the drywell atmosphere. This exemption is requested until the unit 2 cycle 6 refueling outage.

Justification

The current configurations allow only reverse flow testing of the above valves. Block valves and test connections must be installed in order to allow forward flow testing (direction of accident flow). Because these testing requirements were identified during the current unit 2 outage, there is insufficient time available to procure materials, prepare design changes, and implement the necessary modifications without impacting the unit 2 outage schedule.

Enclosure
(Continued)

II. Reverse Flow Testing of Spring Operated Globe Valves (Continued)

Safety Analysis

Appendix J requires forward flow testing of primary containment isolation valves, unless it can be shown that reverse flow testing will provide equal to or more conservative results. The CAD valves are spring operated (to close) globe valves. TVA does not have direct evidence supporting equivalency of reverse flow testing of these valves; however, historical data (type A tests) have proven that these valves have never passed a reverse flow type C test and then failed a subsequent type A test. Each of these valves is one of a pair of valves which form the type A test boundary in the 4 CAD lines and will be type A tested during the current refueling outage. Also, reverse flow type C testing will be continued which will identify any major deterioration of the CAD valves seating. Therefore, the public health and safety will not be adversely affected by granting a temporary exemption until the unit 2 cycle 6 refueling outage.

III. Type C Testing of RHR Vent Return Lines

TVA requests exemption to 10 CFR 50, Appendix J, paragraph III.D.3 (Type C Tests) for the RHR vent return line isolation valves FCV 74-102/103/119/120. The one and one-half inch RHR vent return lines are two branch lines (one and a half inch and two inch) which join to form a single primary containment penetration above the suppression pool water level. Each branch line has two primary containment isolation valves (air operated globe valves). This exemption is requested until the unit 2 cycle 6 refueling outage.

Enclosure
(Continued)

III. Type C Testing of RHR Vent Return Lines (Continued)

Justification

The above valves are not currently testable (type C test). Block valves, drain valves, test connections, and vent valves must be installed to allow type C testing in accordance with Appendix J. Because these testing requirements were identified during the current unit 2 outage, there is insufficient time available to procure materials, prepare design changes, and implement the necessary modifications without impacting the unit 2 outage schedule.

Safety Analysis

Each of the above are primary containment boundaries which are open to the suppression pool atmosphere. Piping outboard of these valves is closed but not qualified, and has a small probability of failure post accident. Each leak path (branch line) will be included in the current unit 2 cycle 5 refueling outage type A test boundary. Historical test data (type A tests) have shown that these primary containment isolation valves have not been a significant contributor to containment leakage; therefore, the granting of a temporary exemption until the unit 2 cycle 6 refueling outage will not adversely affect the public health and safety.

IV. Type C testing of RBCCW System

TVA requests exemption to 10 CFR 50, Appendix J, paragraph III.D.3 (Type C Tests) for the RBCCW system isolation valves 70-47/506. RBCCW is a closed

Enclosure
(Continued)

IV. Type C testing of RBCCW System (Continued)

loop system which penetrates primary containment. It does not strictly meet the requirements of SRP 6.2.4. This exemption is requested until the unit 2 cycle 6 refueling outage.

Justification

The above valves are not currently testable. Block valves, drains, test connections, and vents must be installed to allow type C testing in accordance with Appendix J. These modifications will require removal of the RBCCW system from service which will have a major impact on plant operation during the affected refueling outage. Preparation for this type of operation would significantly impact the current unit 2 refueling outage.

Safety Analysis

The RBCCW system is a closed loop system under original Browns Ferry design criteria (non-qualified in accordance with SRP 6.2.4) which penetrates primary containment. The system does not interface with the primary containment atmosphere or the primary reactor coolant boundary. Testing the isolation valves in accordance with Appendix J provides additional safety margin for the RBCCW containment penetrations that is above and beyond the original plant requirements. Therefore, the granting of an exemption until the unit 2 cycle 6 refueling outage will not adversely affect the public health and safety.

