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

August 31, 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

Enclosed is the proposed inservice pump and valve testing program for the Browns Ferry Nuclear Plant units 1, 2, and 3 written to Section XI of the ASME Boiler and Pressure Vessel Code, 1980 Edition, and Addenda through Winter 1980. Included are requests for relief from ASME code requirements submitted for NRC review pursuant to 10 CFR Part 50, section 50.55a(g)(5)(iii). The proposed technical specifications which will incorporate the requirements of the ASME code and the enclosed program into the Browns Ferry license are still undergoing internal preparation and review and will be submitted in the near future.

The enclosed program constitutes a consolidation of all previous submittals made regarding the Browns Ferry inservice pump and valve testing program, including various submittals of relief requests. All such previous submittals are superceded since the enclosed constitutes the complete and final proposed program.

In accordance with the requirements of 10 CFR Part 170.22, Class III and Class I fees totalling $4,400 were previously forwarded to the NRC for review of Browns Ferry units 1 and 2 inservice pump and valve testing program. The fees were forwarded in response to NRC letter from Reba M. Diggs to H. G. Parris (TVA) dated May 11, 1979. The unit 3 pump and valve testing program had been submitted for NRC review before 10 CFR 170.22 became effective. Additional fees will be provided with the planned technical specification submittal.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager
Nuclear Licensing

Subscribed and sworn to before
me this 31st day of Aug. 1982.

Bryant M. Lackey
Notary Public

My Commission Expires 4/8/86

Enclosure
cc: See page 2

A047

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8209080417 820831
PDR ADOCK 05000259
P PDR

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

Mr. R. J. Clark
Browns Ferry Project Manager
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20014

ENCLOSURE

ASME SECTION XI INSERVICE PUMP
AND VALVE TESTING PROGRAM
BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3
(DOCKET NOS. 50-259, -260, -296)

Attachment 1 - Inservice Testing Program for ASME Code Classes 1, 2, and 3 Pumps

Attachment 2 - Valves to be Cycled for ASME Section XI (IWV-3410, 3510, 3520, and 3610)

Attachment 3 - Category A Valves and Testing Criteria (Appendix J, Section XI, or both)

Attachment 4 - Requests for Relief

ATTACHMENT 1

BROWNS FERRY NUCLEAR PLANT

INSERVICE TESTING PROGRAM FOR ASME
CODE CLASSES 1, 2, AND 3 PUMPS

The following table provides a tabulation of pumps that are subject to the testing requirements of Subsection IWP of Section XI of the ASME Boiler and Pressure Vessel Code, 1980 Edition, and Addenda through Winter 1980. This program will be applicable until September 1988.

This tabulation identifies the pumps to be tested, pump code classes, parameters to be measured, and test intervals.

PUMPS TO BE TESTED

PUMP	No.	Class	N	Pi	P	Q_i	T_b	V	L or P
RHR	4	2	NR	Q	Q	Q	NA	Q	NR
HPCI	1	2	Q	Q	Q	Q	NA	Q	Q
RCIC	1	2	Q	Q	Q	Q	NA	Q	Q
Core Spray	4	2	NR	Q	Q	Q	NA	Q	NR
Standby Liquid Control	2	2	NR	NR	Q	Q	NA	Q	Q
RHRSW(1)	12	3	NR	Q	Q	Q	NA	Q	NR

Symbols

N	Rotative Speed	L or P	Lubricant Level or Pressure
P	Differential Pressure	NR	Not Required
Pi	Inlet Pressure	NA	Not Available
Q_i	Flow Rate	M	Monthly
T_b	Bearing Temperature	Q	Quarterly
V	Vibration Amplitude	A	Annually

(1) These pumps are in a system common to units 1, 2, and 3. Ability to start the pumps will be demonstrated from each control room, but comparison to baseline parameters of vibration, flow rate, and differential pressure will be performed for instrumentation in unit 3 only, for consistency of data.

ATTACHMENT 2

The following table provides a listing of systems, valve numbers, types, categories, test frequencies, and type of tests for those valves to be cycled in accordance with ASME Section XI, IWV-3410, 3510, 3520, and 3610.

SYSTEM	VALVE	CATEGORY	TEST FREQUENCY	TYPE OF TEST
Main Steam	1-14	A	Q	Full Cycle
	1-15	A	Q	Full Cycle
	1-26	A	Q	Full Cycle
	1-27	A	Q	Full Cycle
	1-37	A	Q	Full Cycle
	1-38	A	Q	Full Cycle
	1-51	A	Q	Full Cycle
	1-52	A	Q	Full Cycle
Main Steam (Relief Valves)	1-4	BC	60 months	Meets IWV-3510
	1-5	BC	60 months	Meets IWV-3510
	1-18	BC	60 months	Meets IWV-3510
	1-19	BC	60 months	Meets IWV-3510
	1-22	BC	60 months	Meets IWV-3510
	1-23	BC	60 months	Meets IWV-3510
	1-30	BC	60 months	Meets IWV-3510
	1-31	BC	60 months	Meets IWV-3510
	1-34	BC	60 months	Meets IWV-3510
	1-41	BC	60 months	Meets IWV-3510
	1-42	BC	60 months	Meets IWV-3510
	1-179	BC	60 months	Meets IWV-3510
	1-180	BC	60 months	Meets IWV-3510
Feedwater (Check Valves)	3-554	AC	Operating Cycle	Full Cycle
	3-558	AC	Operating Cycle	Full Cycle
	3-568	AC	Operating Cycle	Full Cycle
	3-572	AC	Operating Cycle	Full Cycle
RHRSW	23-34	B	Q	Meets IWV-3412(a)
	23-40	B	Q	Meets IWV-3412(a)
	23-46	B	Q	Meets IWV-3412(a)
	23-52	B	Q	Meets IWV-3412(a)
	23-57 (U 1&2)	B	Q	Full Cycle
RHRSW (Check Valves)	23-502	C	Q	Full Cycle
	23-506	C	Q	Full Cycle
	23-522	C	Q	Full Cycle
	23-526	C	Q	Full Cycle
	23-542	C	Q	Full Cycle
	23-546	C	Q	Full Cycle
	23-561	C	Q	Full Cycle
	23-565	C	Q	Full Cycle
	23-579 (510 U1)	C	Q	Full Cycle
	23-580 (530 U1)	C	Q	Full Cycle
	23-581 (550 U1)	C	Q	Full Cycle
	23-582 (569 U1)	C	Q	Full Cycle
	23-591	C	Q	Full Cycle
	23-594	C	Q	Full Cycle
	23-597	C	Q	Full Cycle
	23-588	C	Q	Full Cycle

SYSTEM	VALVE	CATEGORY	TEST FREQUENCY	TYPE OF TEST
SLC (Check Valves)	63-514	C	Q	Meets IWV-3522
	63-516	C	Q	Meets IWV-3522
	63-525	AC	Operating Cycle	Meets IWV-3522
	63-526	AC	Operating Cycle	Meets IWV-3522
SLC (Relief Valve)	63-512	C	Operating Cycle	Tech. Spec. 4.4.A.2
	63-513	C	Operating Cycle	Tech. Spec. 4.4.A.2
SLC (Explosive Valves)	63-8A	D	2-year Cycle	IWV-3610
	63-8B	D	2-year Cycle	IWV-3610
EECW	67-13	B	Q	Full Cycle
	67-14	B	Q	Full Cycle
	67-17	B	Q	Full Cycle
	67-18	B	Q	Full Cycle
	67-21	B	Q	Full Cycle
	67-22	B	Q	Full Cycle
	67-25	B	Q	Full Cycle
	67-26	B	Q	Full Cycle
	67-48	B	Q	Full Cycle
	67-49	B	Q	Full Cycle
(Unit 1 Only)	67-56	B	Q	Full Cycle
EECW (Check Valves)	67-502	C	Q	Meets IWV-3522
	67-582	C	Q	Meets IWV-3522
	67-622	C	Q	Meets IWV-3522
	67-619	C	Q	Meets IWV-3522
	67-541	C	Q	Meets IWV-3522
	67-542	C	Q	Meets IWV-3522
	67-584	C	Q	Meets IWV-3522
	67-585	C	Q	Meets IWV-3522
	67-648	C	Q	Meets IWV-3522
	67-649	C	Q	Meets IWV-3522
	67-656	C	Q	Meets IWV-3522
	67-657	C	Q	Meets IWV-3522
	67-559	C	Q	Meets IWV-3522
	67-558	C	Q	Meets IWV-3522
	67-638	C	Q	Meets IWV-3522
	67-639	C	Q	Meets IWV-3522
	67-600	C	Q	Meets IWV-3522
	67-601	C	Q	Meets IWV-3522
	67-659	C	Q	Meets IWV-3522
	67-660	C	Q	Meets IWV-3522
	67-556	C	Q	Meets IWV-3522
	67-598	C	Q	Meets IWV-3522
	67-693	C	Q	Meets IWV-3522
	67-694	C	Q	Meets IWV-3522
	67-695	C	Q	Meets IWV-3522
	67-696	C	Q	Meets IWV-3522
	67-705	C	Q	Meets IWV-3522
	67-706	C	Q	Meets IWV-3522
	67-703	C	Q	Meets IWV-3522
	67-704	C	Q	Meets IWV-3522

SYSTEM	VALVE	CATEGORY	TEST FREQUENCY	TYPE OF TEST
EECW (Check Valves Continued)	67-715	C	Q	Meets IWV-3522
	67-716	C	Q	Meets IWV-3522
	67-713	C	Q	Meets IWV-3522
	67-714	C	Q	Meets IWV-3522
	67-723	C	Q	Meets IWV-3522
	67-724	C	Q	Meets IWV-3522
	67-725	C	Q	Meets IWV-3522
	67-726	C	Q	Meets IWV-3522
	67-737	C	Q	Meets IWV-3522
	67-738	C	Q	Meets IWV-3522
	67-735	C	Q	Meets IWV-3522
	67-736	C	Q	Meets IWV-3522
Recirculation Loops	68-3	B	Cold Shutdown	Full Cycle
	68-79	B	Cold Shutdown	Full Cycle
Recirculation Loops (Check Valves)	68-508	AC	Operating Cycle	Full Cycle
	68-523	AC	Operating Cycle	Full Cycle
	68-550	AC	Operating Cycle	Full Cycle
	68-555	AC	Operating Cycle	Full Cycle
RWCU	69-1	A	Q	Full Cycle
	69-2	A	Q	Full Cycle
RWCU (Check Valves)	69-579	AC	Operating Cycle	Full Cycle
	69-624 (Unit 3)	AC	Operating Cycle	Full Cycle
RCIC	71-2	A	Cold Shutdown	Full Cycle
	71-3	A	Cold Shutdown	Full Cycle
	71-5	B	Q	Full Cycle
	71-6A	B	Q	Full Cycle
	71-6B	B	Q	Full Cycle
	71-34	B	Q	Full Cycle
	71-8	B	Q	Meets IWV-3412 (a)
	71-9	B	Q	Meets IWV-3412 (a)
	71-10	B	Q	Meets IWV-3412 (a)
	71-17	B	Q	Full Cycle
	71-18	B	Q	Full Cycle
	71-25	B	Q	Full Cycle
	71-37	B	Cold Shutdown	Full Cycle
	71-39	A	Cold Shutdown	Full Cycle
	71-40	AC	Cold Shutdown	Full Cycle
	71-22	B	Q	Meets IWV-3412 (a)
RCIC (Check Valves)	71-580	AC	Q	Meets IWV-3522
	71-597	C	Q	Meets IWV-3522
	71-598	C	Q	Meets IWV-3522
	71-599	C	Q	Meets IWV-3522
	71-600	C	Q	Meets IWV-3522
	71-508	C	Operating Cycle	Internal Inspection
	71-592	AC	Q	Meets IWV-3522
RCIC (Relief Valves)	71-543	C	60 Months	Meets IWV-3510

SYSTEM	VALVE	CATEGORY	TEST FREQUENCY	TYPE OF TEST
RCIC	71-14	A	-	None
(Locked Valves)	71-32	A	-	None
HPCI	73-81	A	Q	Full Cycle
	73-2	A	Cold Shutdown	Full Cycle
	73-3	A	Cold Shutdown	Full Cycle
	73-5	B	Q	Full Cycle
	73-6A	B	Q	Full Cycle
	73-6B	B	Q	Full Cycle
	73-16	B	Q	Meets IWV-3412 (a)
	73-18	B	Q	Meets IWV-3412 (a)
	73-19	B	Q	Meets IWV-3412 (a)
	73-26	B	Q	Full Cycle
	73-27	B	Q	Full Cycle
	73-34	B	Cold Shutdown	Full Cycle
	73-43	B	Q	Meets IWV-3412 (a)
	73-44	A	Cold Shutdown	Full Cycle
	73-45	AC	Cold Shutdown	Full Cycle
	73-30	B	Q	Full Cycle
HPCI (Relief Valves)	73-574	C	60 Months	Meets IWV-3510
HPCI (Locked Valves)	73-23	A	-	None
	73-24	A	-	None
HPCI (Check Valves)	73-517	C	Operating Cycle	Internal Inspection
	73-603	AC	Q	Meets IWV-3522
	73-609	AC	Q	Meets IWV-3522
	73-633	C	Q	Meets IWV-3522
	73-634	C	Q	Meets IWV-3522
	73-635	C	Q	Meets IWV-3522
	73-636	C	Q	Meets IWV-3522
RHR	74-1	B	Q	Full Cycle
	74-2	B	Q	Full Cycle
	74-7	B	Q	Full Cycle
	74-12	B	Q	Full Cycle
	74-13	B	Q	Full Cycle
	74-24	B	Q	Full Cycle
	74-25	B	Q	Full Cycle
	74-30	B	Q	Full Cycle
	74-35	B	Q	Full Cycle
	74-36	B	Q	Full Cycle
	74-47	A	Cold Shutdown	Full Cycle
	74-48	A	Cold Shutdown	Full Cycle
	74-52	B	Q	Full Cycle
	74-53	A	Cold shutdown	Full Cycle
	74-54	AC	Cold Shutdown	Full Cycle
	74-57	A	Q	Full Cycle
	74-58	A	Q	Full Cycle
	74-59	B	Q	Full Cycle
	74-60	A	Q	Full Cycle

SYSTEM	VALVE	CATEGORY	TEST FREQUENCY	TYPE OF TEST
RHR (Continued)	74-61	A	Q	Full Cycle
	74-66	B	Q	Full Cycle
	74-67	A	Cold Shutdown	Full Cycle
	74-68	AC	Cold Shutdown	Full Cycle
	74-71	A	Q	Full Cycle
	74-72	A	Q	Full Cycle
	74-73	B	Q	Full Cycle
	74-74	A	Q	Full Cycle
	74-75	A	Q	Full Cycle
	74-77	A	Cold Shutdown	Full Cycle
	74-78	A	Cold Shutdown	Full Cycle
	74-96	B	Q	Full Cycle
	74-97	B	Q	Full Cycle
	74-100 (U 2 & 3)	B	Q	Full Cycle
	74-101 (U 1 & 2)	B	Q	Full Cycle
	74-98	B	Q	Full Cycle
	74-99	B	Q	Full Cycle
RHR (Check Valves)	74-559A	C	Q	Meets IWV-3522
	74-559B	C	Q	Meets IWV-3522
	74-559C	C	Q	Meets IWV-3522
	74-559D	C	Q	Meets IWV-3522
	74-661	AC	Operating Cycle	Meets IWV-3522
	74-662	AC	Operating Cycle	Meets IWV-3522
	74-560A	C	Q	Meets IWV-3522
	74-560B	C	Q	Meets IWV-3522
	74-560C	C	Q	Meets IWV-3522
	74-560D	C	Q	Meets IWV-3522
Core Spray	75-2	B	Q	Full Cycle
	75-9	B	Q	Full Cycle
	75-11	B	Q	Full Cycle
	75-22	B	Q	Full Cycle
	75-23	B	Q	Full Cycle
	75-25	A	Cold Shutdown	Full Cycle
	75-26	AC	Cold Shutdown	Full Cycle
	75-30	B	Q	Full Cycle
	75-37	B	Q	Full Cycle
	75-39	B	Q	Full Cycle
	75-50	B	Q	Full Cycle
	75-51	B	Q	Full Cycle
	75-53	A	Cold Shutdown	Full Cycle
	75-54	AC	Cold Shutdown	Full Cycle
	75-57	A	Q	Full Cycle
	75-58	A	Q	Full Cycle
Core Spray (Check Valve)	75-537A	C	Q	Meets IWV-3522
	75-537B	C	Q	Meets IWV-3522
	75-537C	C	Q	Meets IWV-3522
	75-538D	C	Q	Meets IWV-3522
	75-570A	C	Q	Meets IWV-3522
	75-570B	C	Q	Meets IWV-3522
	75-570C	C	Q	Meets IWV-3522
	75-570D	C	Q	Meets IWV-3522

SYSTEM	VALVE	CATEGORY	TEST FREQUENCY	TYPE OF TEST
Core Spray (Relief Valves)	75-507A	C	60 Months	Meets IWV-3510
	75-507B	C	60 Months	Meets IWV-3510
	75-507C	C	60 Months	Meets IWV-3510
	75-507D	C	60 Months	Meets IWV-3510
Floor and Equipment Drains	77-2A	A	Q	Full Cycle
	77-2B	A	Q	Full Cycle
	77-15A	A	Q	Full Cycle
	77-15B	A	Q	Full Cycle
CRD Hydraulic System	85-39A-(1-185)B	B	10% of valves every 16 weeks, valves also cycle during any unit scram, all valves also tested each refueling outage	Full Cycle
	85-39B-(1-185)B	B		Full Cycle

ATTACHMENT 3

This table identifies the Category A valves, and the testing criteria (Appendix J, Section XI, or both) to be satisfied at each refueling outage. Testing criteria is based on Items 2, 3, and 4 of Testing Requirements and Request forRelief, attached to NRC (T. A. Ippolito) letter to TVA (N. B. Hughes) of August 8, 1978.

TESTING CRITERIA

Valve No.	10 CFR 50, Appendix J	ASME Section XI
1-14	X	
1-15	X	
1-26	X	
1-27	X	
1-37	X	
1-38	X	
1-51	X	
1-52	X	
1-55	X	
1-56	X	
3-554	X	
3-558	X	
3-568	X	
3-572	X	
63-525	X	
63-526	X	
68-508	X	
68-523	X	
68-550	X	
68-555	X	
69-1	X	
69-2	X	
69-579	X	
69-624 (Unit 3)	X	
71-2	X	
71-3	X	
71-39	X	
71-40	X	
71-14	X	
71-32	X	
71-580	X	
71-592	X	

Valve No.	10 CFR 50, Appendix J	ASME Section XI
73-2	X	
73-3	X	
73-81	X	
73-44	X	
73-45	X	
73-23	X	
73-24	X	
73-603	X	
73-609	X	
74-47	X	X
74-48	X	X
74-53	X	X
74-54	X	X
74-57	X	
74-58	X	
74-60	X	
74-61	X	
74-67	X	X
74-68	X	X
74-71	X	
74-72	X	
74-74	X	
74-75	X	
74-77	X	X
74-78	X	X
74-661	X	X
74-662	X	X
75-25	X	X
75-26	X	X
75-53	X	X
75-54	X	X
75-57	X	
75-58	X	
77-2A	X	
77-2B	X	
77-15A	X	
77-15B	X	

ATTACHMENT 4

REQUEST FOR RELIEF

REQUEST FOR RELIEF PV - 1

COMPONENTS - RHR Pumps A, B, C, D; HPCI Pump; RCIC pump; Core Spray Pumps A, B, C, D; SLC Pumps A, B; RHRSW Pumps A1, A2, A3, B1, B2, B3, C1, C2, C3, D1, D2, D3.

CLASS - Class 2, except RHRSW Pumps which are Class 3.

FUNCTION - ECCS and Core Heat Removal (RHRSW Pumps).

TEST REQUIREMENT - Monitoring bearing temperatures during quarterly inservice testing.

BASIS FOR RELIEF - All of these pumps, except HPCI and RCIC, have water lubricated pump bearings. The RHR, Core Spray, SLC, and RHRSW pump bearings are lubricated by water supplied by the pump itself. Satisfactory pump operation is indicative of sufficient bearing lubrication. HPCI and RCIC have oil cooled bearings, but these pumps can't be operated long enough to reach stable bearing temperatures without overheating the torus and causing plant shutdown. The HPCI bearings, which are instrumented, are monitored during testing. RCIC bearings do not have temperature instrumentation.

ALTERNATE TESTING - None

REQUEST FOR RELIEF PV - 2

COMPONENTS - Standby Liquid Control Pumps

CLASS - 2

FUNCTION - ECCS and alternate reactor shutdown capability.

TEST REQUIREMENT - Quarterly measurement of inlet pressure and differential pressure.

BASIS FOR RELIEF - During testing these pumps take suction from a test tank that has a relatively small range of level variation during pump operation. In addition, these are positive displacement pumps whose inlet pressure does not affect pump operating characteristics. Therefore, differential pressure measurement is not important.

ALTERNATE TESTING - Pump discharge pressure will be measured during quarterly testing. A caution note has been placed in the instruction that governs this test so that a minimum level is maintained in the test tank. This ensures discharge pressure is an adequate indication of pump performance.

REQUEST FOR RELIEF PV - 3

COMPONENTS	-	Standby Liquid Control Pumps
CLASS	-	2
FUNCTION	-	ECCS and alternate reactor shutdown capability.
TEST REQUIREMENT	-	Running pumps for five minutes before measuring parameters.
BASIS FOR RELIEF	-	These pumps are tested by circulating liquid to a test tank for 2 minutes and measuring the volume change in the tank. Running for 5 minutes before measuring parameters is not compatible with the system design. However, a 15 minute functional test which involves recirculating water back to the test tank is run before the system is lined up for the Section XI test requirement. This 15 minute test is of sufficient length for all parameters to stabilize and the two minute test is run immediately afterward.
ALTERNATE TESTING	-	Measure parameters during 2 minute test.

REQUEST FOR RELIEF PV - 4

SYSTEM - All systems

TEST REQUIREMENT - Analysis of test data within 96 hours per IWP - 3220.

BASIS FOR RELIEF - Due to the time involved in processing surveillance instructions to the reviewer and the possibility of weekends and/or holidays falling between running tests and completely reviewing the results, 96 hours is impractical.

ALTERNATE TESTING - Pump parameters of flow rate and differential pressure will be reviewed immediately after the test by the individual performing the test to verify that they do not fall within the "Required Action Range" of Table IWP-3100-2. Complete analysis of test data will be performed within 4 working days of the tests. If the pump parameters fall within the "Required Action Range", the individual performing the test will notify the cognizant reviewer and carry out the necessary action required by the code.

REQUEST FOR RELIEF PV - 5

COMPONENTS - Installed plant instrumentation and portable instruments used to measure pump parameters.

CLASS - 1, 2, and 3

FUNCTION - Measurement of pump parameters.

TEST REQUIREMENT - Instrument accuracy shall be within the limits of Table IWP-4110-1.

BASIS FOR RELIEF - The accuracy of installed plant indicators is ±2% of full scale. However, the accuracy of installed transmitters and square-rooters is 0.5% and when these are taken into account the instrument loop accuracies are 2.5% and 3.0% for pressure loops and flow loops, respectively. The plant installed instruments will continue to be used since any alternate method such as connecting test instruments into the system or replacing plant instrumentation, will not provide sufficient benefit to outweigh the added cost and manpower of the alternate methods.

The portable instrument used to measure vibration amplitude has an accuracy of 11% of full scale. The instrument has been used from the beginning of the program to collect the vibration data and develop all the vibration baselines that are used in the pump program. Since all other requirements for measuring amplitude (IWP-4520) have been met and since the instrument used is an accepted standard method for industrial vibration measurements, the instrument will continue to be used.

ALTERNATE TESTING - An equipment diagnostic program using much more sophisticated instruments and methods monitors rotating equipment at the plant and provides much better vibration data on the pumps than the one required data point of the pump program. This program is done in addition to the test requirement.

REQUEST FOR RELIEF PV - 6

COMPONENTS - All valves

CLASS - A, B, C

FUNCTION - Various functions

TEST REQUIREMENT - Corrective action on an inoperable valve required before startup per IWV-3417 and IWV-3523.

BASIS FOR RELIEF - Limiting conditions for startup have been analyzed in Browns Ferry Technical Specifications, Technical Bases 3.4.B, 4.4, 3.5.A, 3.5.B, 3.5.C. 3.5.E, 3.5.F.

ALTERNATE TESTING - Valve inoperability will preclude unit startup only if the valve places the system itself in a position of preventing startup per present technical specifications.

REQUEST FOR RELIEF PV - 7

SYSTEM - CRD (Scram Function)

VALVES - 85-39A - (1-185)
85-39B - (1-185)

CLASS - 1

CATEGORY - B

FUNCTION - Provide flow path for water for control rod scrams.

TEST REQUIREMENT - Exercised once every 3 months.

BASIS FOR RELIEF - Cycling these valves requires scramming 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 places an unfair burden on the licensee.

b. Fuel preconditioning must follow this power reduction to avoid possible fuel damage. The longer the reduction in power, the longer the preconditioning.

ALTERNATE TESTING - 10% of the rods will be scram tested every sixteen weeks, and all rods will be scram tested during refueling, per present Technical Specifications. In addition, all rods are provided with the same test during normal operation when the unit scrams.

REQUEST FOR RELIEF PV - 8

SYSTEMS/ COMPONENTS (VALVES)	-	Feedwater - 3-554, 3-558, 3-568, 3-572 Standby Liquid Control - 63-525, 63-526 Reactor Recirculation System - 68-508, 68-523, 68-550, 68-555 Reactor Water Cleanup - 69-579, 69-624 (Unit 3 only) Residual Heat Removal - 74-661, 74-662
CLASS	-	1
CATEGORY	-	AC
FUNCTION	-	All are containment isolation, plus; prevents backflow in feedwater lines (System 3), prevents backflow in RWCU System (System 69), and thermal expansion relief (System 74).
TEST REQUIREMENT	-	Exercise valves for operability quarterly.
BASIS FOR RELIEF	-	All of these valves are check valves whose operation cannot be verified during plant operation. Testing requires entry into primary containment, stopping RWCU system operation (System 69), or interrupting seal water to the recirculation pumps (System 68) which is very likely to cause seal damage.
ALTERNATE TESTING	-	Valves will be tested in accordance with 10 CFR 50, Appendix J, at each refueling outage. Testing each refueling outage for check valves is in line with the NRC's latest philosophy on testing check valves.

REQUEST FOR RELIEF PV - 9

SYSTEMS/ COMPONENTS (VALVES)	-	Reactor Core Isolation Cooling - 71-508 High Pressure Coolant Injection - 73-517
CLASS	-	2
CATEGORY	-	C
FUNCTION	-	Valves prevent backflow to the torus from the RCIC and HPCI, respectively.
TEST REQUIREMENT	-	Exercise valve for operability quarterly.
BASIS FOR RELIEF	-	Valves cannot be cycled without introducing torus water into the vessel. This water is of such quality that it should not be introduced into the vessel unless an accident has occurred.
ALTERNATE TESTING	-	Valve internals will be visually and manually checked each refueling outage by removal of valve access plates. Testing cneck valves each refueling outage is in line with the NRC's latest philosoophy on testing check valves.