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Docket No. 50-348

10CFR50.55a(g)(6)(i)

March 29, 1988

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

Gentlemen:

Joseph M. Farley Nuclear Plant - Unit 1
Second Ten Year Interval Inservice Testing Program
for ASME Code Class 1, 2 and 3 Pumps and Valves
(TAC 65489)

Alabama Power Company previously submitted Revision 0 of the subject Inservice Testing (IST) Program to the NRC by letters dated September 30 and November 20, 1987 and Revision 1 by letter dated March 17, 1988. By letter dated December 10, 1987, the NRC granted interim approval for the relief requests submitted with Revision 0 of the IST Program. However, the NRC stated that interim relief for 23 valves in the high and low head safety injection systems was granted only until the next refueling outage scheduled to start in March 1988. The NRC's basis for granting only interim relief on these valves was that Alabama Power Company had "not provided sufficient technical information for the staff to conclude that the Section XI testing requirements either have been met or are impractical." By letter dated September 30, 1987, Alabama Power Company submitted a detailed technical evaluation of the system test presently utilized to verify forward flow operability of these valves. In this evaluation, Westinghouse concluded that "the current test procedures provide adequate assurance that the check valves will perform properly." However, in an effort to reach interim resolution, Alabama Power Company developed an alternative test methodology for valve disassembly which was submitted by letter dated March 17, 1988. Conference calls held with the NRC between March 3 and 8, 1988, included discussions of valve disassembly and the installation of instrumentation as acceptable test alternatives. Relief is herewith requested to enable Alabama Power Company to implement either of these alternatives. Alabama Power Company also requests final approval of its Unit 1 IST Program as documented by this letter and the previous letters of September 30 and November 20, 1987.

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To summarize the reliefs required for this alternative methodology, the following is submitted for NRC consideration. In lieu of the system test previously utilized, valve disassembly on a sampling basis and/or individual branch line instrumentation indications taken during the system test will be employed at each refueling outage to verify valve forward flow operability. These alternatives are described in the enclosure, which contains the revised valve tables and relief requests necessary to accommodate these test methods. This enclosure constitutes Revision 1 of the IST Program.

Valve disassembly on a sampling basis will be performed during each refueling outage on one valve from each of the following five groups of valves as described in the referenced relief requests:

TPNS NUMBER	WESTINGHOUSE NUMBER	SCHEDULAR RELIEF REQUEST	OPERABILITY RELIEF REQUEST
Q1E11V021A, B & C	8973A, B & C	Q1E11-RV-7	Q1E11-RV-4
Q1E11V051A, B & C	8998A, B & C	Q1E11-RV-3	Q1E11-RV-5
Q1E21V062A, B & C	8997A, B & C	Q1E21-RV-4	Q1E21-RV-10
Q1E21V066A, B & C	8995A, B & C	Q1E21-RV-6	Q1E21-RV-10
Q1E21V078A, B & C	8990A, B & C	Q1E21-RV-6	Q1E21-RV-10
Q1E21V079A, B & C	8992A, B & C	Q1E21-RV-6	Q1E21-RV-10
Q1E21V077A, B & C	8993A, B & C	Q1E21-RV-11	Q1E21-RV-14

As an alternative to the above, Alabama Power Company may elect at a later date to install differential pressure measurement instrumentation on the existing flow balancing orifices which are installed upstream of twelve of these valves. During the high head safety injection system tests, parallel flow through all branches for each group of valves will be established and proper flow balance in each branch relative to total system flow rates will be verified. Since the high head safety injection system test can only be conducted during refueling outages, schedular relief from quarterly and cold shutdown test frequencies is requested. Verification of flow balance in each of the branch lines upstream of the valves provides individual verification of valve operability and therefore no additional relief from Code requirements is needed. The two groups of valves with installed flow balancing orifices and their associated schedular reliefs are as follows:

TPNS NUMBER	WESTINGHOUSE NUMBER	SCHEDULAR RELIEF REQUEST
Q1E21V062A, B & C	8997A, B & C	Q1E21-RV-4
Q1E21V066A, B & C	8995A, B & C	Q1E21-RV-6
Q1E21V078A, B & C	8990A, B & C	Q1E21-RV-6
Q1E21V079A, B & C	8992A, B & C	Q1E21-RV-6

It should be noted that the alternative test methodology described above addresses 21 of the 23 valves identified in the NRC letter of December 10, 1987. The remaining two valves, Q1E21V076A & B (8988A & B) are passive and serve a safety related function only as primary pressure isolation valves. Therefore, these valves are not required to open to perform their safety function and verification of individual forward flow capability is not required. On this basis the reliefs requested do not address these valves.

Relief requests Q1E11-RV-2, Q1E11-RV-6, Q1E21-RV-12 and Q1E21-RV-13 included in the enclosure contain editorial changes only. Relief Request Q1E21-RV-15 has been deleted since the necessary relief for valves Q1E21V077A & B has been combined into a similar relief request (Q1E21-RV-14) for valve Q1E21V077C.

It is respectfully requested that the reliefs included in Revision 1 of the IST Program be granted by September 21, 1988. The required fees for review of the IST Program were submitted by letter dated May 27, 1987; therefore, no additional fees are included.

Respectfully submitted,

ALABAMA POWER COMPANY

R. P. McDonald

RPM/STB:csl-V4

Enclosure

cc: Mr. L. B. Long
Dr. J. N. Grace
Mr. E. A. Reeves
Mr. W. H. Bradford
Mr. H. Rockhold

ENCLOSURE
IST PROGRAM REVISION 1
SUMMARY OF CHANGES

REMOVE PAGE	INSERT PAGE	DESCRIPTION OF CHANGE
III-1-2-1	III-1-2-1	Revised relief request references for valves QV021A, B & C.
III-1-2-2	III-1-2-2	Revised relief request references for valves QV021A, B & C.
III-1-2-8	III-1-2-8	Deleted reference to valves QV021A, B & C and their Code class.
III-1-2-9	III-1-2-9	Revised the "Basis for Relief" and "Alternate Testing" statements.
III-1-2-10	III-1-2-10	Revised the "Basis for Relief" and "Alternate Testing" statements.
III-1-2-11	III-1-2-11	Revised the "Basis for Relief" and "Alternate Testing" statements.
III-1-2-12	III-1-2-12	Editorial change to renumber existing relief request Q1E11-RV-6.
III-1-2-13	III-1-2-13	New relief request added for valves QV021A, B & C.
III-1-2-14	-	Deleted page.
III-1-7-4	III-1-7-4	Revised relief request reference for valves QV077A & B.
III-1-7-19	III-1-7-19	Revised the "Basis for Relief" and "Alternate Testing" statements.
III-1-7-21	III-1-7-21	Revised the "Basis for Relief" and "Alternate Testing" statements.
III-1-7-25	III-1-7-25	Revised the "Basis for Relief" and "Alternate Testing" statements.

ENCLOSURE
IST PROGRAM REVISION 1
SUMMARY OF CHANGES

REMOVE PAGE	INSERT PAGE	DESCRIPTION OF CHANGE
III-1-7-26	III-1-7-26	Revised the "Basis for Relief" and "Alternate Testing" statements.
III-1-7-27	III-1-7-27	Editorial change to renumber existing relief request Q1E21-RV-12.
III-1-7-28	III-1-7-28	Editorial change to renumber existing relief request Q1E21-RV-13.
III-1-7-29	III-1-7-29	Revised the "Basis for Relief" and "Alternate Testing" statements.
III-1-7-30	-	Deleted page.
III-1-7-31	-	Deleted page.
III-1-7-32	-	Deleted page. Relief request for valves QV077A & B was combined with relief request valves QV077C (Q1E21-RV-14).

STB:csl-V4

Valve Number	Class ISI	Dwg No. (Coord.)	Valve Size Cat	Valve Size (in.)	Valve Size Type	Act. Type	Position Norm	Position Fail	Position Safety	Act. or Pass.	Tests and Freq. PI	ET	ST	DR	FSV	LT	Relief Req. or C. S. Just.	Description and Notes
QV001A 1-8701A	1	D-175041 G-3 D-351118 G-3	A	12	GA	MO	C	AI	O/C	A	Y	CS	CS	C	-	LC	Q1E11-CS-1	RC Loop 1C to RHR Pump 1A.
QV001B 1-8702A	1	D-175041 E-3 D-351118 E-3	A	12	GA	MO	C	AI	O/C	A	Y	CS	CS	C	-	LC	Q1E11-CS-1	RC Loop 1A to RHR Pump 1B.
QV009A 1-8706A	2	D-175041 B-8 D-351118 B-8	B	8	GA	MO	C	AI	O	A	Y	Q	Q	O	-	-	-	RHR HX 1A to Charging Pump Suction.
QV009B 1-8706B	2	D-175041 C-8 D-351118 D-8	B	8	GA	MO	C	AI	O	A	Y	Q	Q	O	-	-	-	RHR HX 1B to Charging Pump Suction.
QV015A 1-8708A	2	D-175041 G-4 D-351118 G-4	C	3x4	SR	S	C	N/A	O/C	A	-	T	-	-	-	-	-	RHR Pump Suction.
QV015B 1-8708B	2	D-175041 E-4 D-351118 E-4	C	3x4	SR	S	C	N/A	O/C	A	-	T	-	-	-	-	-	RHR Pump Suction.
QV016A 1-8701B	1	D-175041 G-2 D-351118 G-2	A	12	GA	MO	C	AI	O	A	Y	CS	CS	O	-	LA	Q1E11-CS-1	RC Loop 1C to RHR Pump 1A.
QV016B 1-8702B	1	D-175041 E-2 D-351118 E-2	A	12	GA	MO	C	AI	O	A	Y	CS	CS	O	-	LA	Q1E11-CS-1	RC Loop 1A to RHR Pump 1B.
QV021A 1-8973A	1	D-175038/2 E-1 D-351115/2 E-1	AC	6	CK	S	C	N/A	O	A	-	R	-	FF	-	LA	Q1E11-RV-4 Q1E11-RV-7	RHR Pump Disc. to SIS Injection CL.
QV021B 1-8973B	1	D-175038/2 F-1 D-351115/2 F-1	AC	6	CK	S	C	N/A	O	A	-	R	-	FF	-	LA	Q1E11-RV-4 Q1E11-RV-7	RHR Pump Disc. to SIS Injection CL.

Valve Number	Class ISI	Dwg. No. (Coord.)	Valve Size Cat	Valve Size (in.)	Valve Size Type	Act. Type	Position Norm	Position fail	Position Safety	Act. or Pass.	Tests and Freq. PI	ET	ST	DR	FSV	LT	Relief Req. or C. S. Just.	Description and Notes
QV021C 1-8973C	1	D-175038/2 G-1 D-351115/2 G-1	AC	6	CK	S	C	N/A	O	A	-	R	-	FF	-	LA	Q1E11-RV-4 Q1E11-RV-7	RHR Pump Disc. to SIS Injection CL.
QV023A 1-8888B	2	D-175038/2 G-3 D-351115/2 G-3	B	10	GA	MO	O	AI	O/C	A	Y	Q	Q	C	-	-	-	RHR HX A to RCS CL Isolation.
QV023B 1-8888A	2	D-175038/2 F-3 D-351115/2 F-3	B	10	GA	MO	O	AI	O/C	A	Y	Q	Q	C	-	-	-	RHR HX B to RCS CL Isolation.
QV024A 1-8887A	2	D-175038/2 F-4 D-351115/2 F-4	B	10	GA	MO	O	AI	O/C	A	Y	Q	Q	C	-	-	-	RHR to RCS HL Cross Connect.
QV024B 1-8887B	2	D-175038/2 G-4 D-351115/2 G-4	B	10	GA	MO	O	AI	O/C	A	Y	Q	Q	C	-	-	-	RHR to RCS HL Cross Connect.
QV025A 1-8811A	2	D-175038/2 J-4 D-351115/2 J-4	A	14	GA	MO	C	AI	O/C	A	-	Q	Q	O	-	LJ	Q1E11-RV-1	Ctmt. Sump to RHR Pump 1A.
QV025B 1-8811B	2	D-175038/2 H-4 D-351115/2 H-4	A	14	GA	MO	C	AI	O/C	A	-	Q	Q	O	-	LJ	Q1E11-RV-1	Ctmt. Sump to RHR Pump 1B.
QV026A 1-8812A	2	D-175038/2 J-5 D-351115/2 J-5	A	14	GA	MO	C	AI	O	A	Y	Q	Q	O	-	LJ	-	Ctmt. Sump to RHR Pump 1A.
QV026B 1-8812B	2	D-175038/2 H-5 D-351115/2 H-5	A	14	GA	MO	C	AI	O	A	Y	Q	Q	O	-	LJ	-	Ctmt. Sump to RHR Pump 1B.
QV027A 1-8809A	2	D-175038/2 F-10 D-351115/2 F-10	B	14	GA	MO	C	AI	C	A	Y	Q	Q	C	-	-	-	RWST to RHR Pump 1A.

RELIEF REQUEST

Q1E11-RV-2

System:	LHSI/RHR
Valve:	QV042A, QV042B
Category:	AC
Class:	2
Function:	LHSI/RHR to RCS cold leg injection line check valves.
ASME Section XI Quarterly Test Requirements:	Verify forward-flow operability quarterly or at cold shutdown (IWV-3521).
Basis for Relief:	Verification of forward-flow operability of these normally closed check valves can only be performed by injecting RHR water into the RCS. During normal operation the low-pressure LHSI/RHR pumps cannot overcome the higher RCS operating pressure. Verification of full design flow rate operability cannot be done at cold shutdown due to back pressure from the reactor coolant system. Verification of full-flow operability can only be done at refueling with the RCS depressurized, the reactor vessel head removed, upper internals in place, and the refueling cavity at refueling level.
Alternate Testing:	Valves will be forward-flow verified when the SI/LOSP test is being performed.

RELIEF REQUEST

Q1E11-RV-3

System:	LHSI/RHR
Valve:	QV051A, QV051B, QV051C
Category:	C
Class:	1
Function:	HHSI/LHSI to RCS cold leg injection line check valves
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability quarterly or at cold shutdown (IWV-3521)
Basis for Relief:	Disassembly of these valves can only be done with the RCS depressurized and the reactor vessel level at mid-plane.
Alternate Testing:	Valves will be disassembled on a staggered basis at refueling.

RELIEF REQUEST

Q1E11-RV-4

System:	LHSI/RHR
Valve:	QV021A, QV021B, QV021C
Category:	AC
Class:	1
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability (IWV-3522)
Basis for Relief:	These 6-inch Velan swing check valves are located in the low-head safety injection flow paths to the reactor coolant system cold legs. Individual line flow rate cannot be used to verify individual valve operability due to lack of instrumentation.
Alternate Testing:	One of these valves will be disassembled and manually full stroke tested at each refueling on a staggered test basis. If stroke testing reveals that the valve is inoperable, the remaining valves will be disassembled.

RELIEF REQUEST

Q1E11-RV-5

System:	LHSI/RHR
Valve:	QV051A, QV051B, QV051C
Category:	C
Class:	1
ASME Section XI Quarterly Test Requirements	Verify forward flow operability (IWV-3522)
Basis for Relief:	These 6-inch Velan swing check valves are located in the shared low-head and high-head safety injection lines to the reactor coolant system cold legs. Individual line flow rate cannot be used to verify individual valve operability due to lack of instrumentation.
Alternate Testing:	One of these valves will be disassembled and manually full stroke tested at refueling on a staggered test basis. If stroke test reveals that the valve is inoperable, the remaining valves will be disassembled.

RELIEF REQUEST

Q1E11-RV-6

System:	LHSI/RHR
Valve:	QV032A, QV032B, QV033A, QV033B
Category:	B
Class:	2
Function:	RHR HX. tube side discharge to SIS (QV032A,B) and RHR HX. bypass (QV033A,B).
ASME Section XI Quarterly Test Requirements:	Measure valve stroke time.
Basis for Relief:	Valves QV032A,B are the RHR heat exchanger outlet valves and QV033A,B are the RHR heat exchanger bypass valves. Valves QV032A,B are normally open, fail open and valves QV033A,B are normally closed, fail closed valves. This is the required valve alignment for the LHSI mode of operation. The RHR function of these valves is to control cooldown rate by regulating flow through the RHR heat exchangers. Both the flow control and bypass valves modulate to control the amount of heat removal by the RHR heat exchangers. Valves QV032A,B modulate in response to a manually controlled position signal and valves QV033A,B automatically modulate to adjust bypass flow in response to the set position of valves QV032A,B. The only way to full stroke the valves is by manually adjusting the flow-control valve position control station through the full range of adjustment.
Alternate Testing:	The valves will be tested quarterly by stroking each valve through its full range of travel.

RELIEF REQUEST

Q1E11-RV-7

System:	LHSI/RHR
Valve:	QV021A, QV021B, QV021C
Category:	AC
Class:	1
Function:	LHSI/RHR to RCS cold leg injection line check valves
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability quarterly or at cold shutdown (IWV-3521)
Basis for Relief:	Disassembly of these valves can only be done with the RCS depressurized and the reactor vessel level at mid-plane.
Alternate Testing:	Valves will be disassembled on a staggered basis at refueling.

Valve Number	Class ISI	Dwg. No. (Cold ,)	Valve Size Cat	Valve Size (in.)	Valve Size Type	Act. Type	Position Norm	Position Fail	Position Safety	Act. or Pass.	Tests and Freq. PI	ET	ST	DR	FSV	LT	Relief Req. or C. S. Just.	Description and Notes
QV072 1-8884	2	D-175038/1 J-6 D-351115/1 J-6	B	3	GA	MO	C	AI	O	A	Y	CS	CS	O	-	-	Q1E21-RV-5	HHSI Pump Recirculation to RCS Hot Legs.
QV076A 1-8968A	1	D-175038/1 F-4 D-351115/1 F-4	AC	6	CK	S	C	N/A	C	P	-	-	-	-	-	LA	-	Water from Loop 1 RHR HX to RCS Hot Leg. See relief request Q1E21-RV-15.
QV076B 1-8988B	1	D-175038/1 G-4 D-351115/1 G-4	AC	6	CK	S	C	N/A	C	P	-	-	-	-	-	LA	-	Water from Loop 2 RHR HX to RCS Hot Leg. See relief request Q1E21-RV-15.
QV077A 1-8993A	1	D-175038/1 F-2 D-351115/1 F-2	AC	6	CK	S	C	N/A	O	A	-	R	-	FF	-	LA	Q1E21-RV-11 Q1E21-RV-14	LHSI/RHR/HHSI to RCS Hot Leg Loop 1.
QV077B 1-8993B	1	D-175038/1 G-2 D-351115/1 G-2	AC	6	CK	S	C	N/A	O	A	-	R	-	FF	-	LA	Q1E21-RV-11 Q1E21-RV-14	LHSI/RHR/HHSI to RCS Hot Leg Loop 2.
QV077C 1-8993C	1	D-175038/1 G-1 D-351115/1 G-1	AC	6	CK	S	C	N/A	O	A	-	R	-	FF	-	LA	Q1E21-RV-11 Q1E21-RV-14	HHSI to RCS Hot Leg Loop 3.
QV078A 1-8990A	1	D-175038/1 G-3 D-351115/1 G-4	C	2	CK	S	C	N/A	O	A	-	R	-	FF	-	-	Q1E21-RV-6 Q1E21-RV-10	HHSI Pump Discharge to RCS Hot Leg.
QV078B 1-8990B	1	D-175038/1 G-3 D-351115/1 G-3	C	2	CK	S	C	N/A	O	A	-	R	-	FF	-	-	Q1E21-RV-6 Q1E21-RV-10	HHSI Pump Discharge to RCS Hot Leg.
QV078C 1-8990C	1	D-175038/1 G-3 D-351115/1 G-3	C	2	CK	S	C	N/A	O	A	-	R	-	FF	-	-	Q1E21-RV-6 Q1E21-RV-10	HHSI Pump Discharge to RCS Hot Leg.

RELIEF REQUEST

Q1E21-RV-4

System:	SI/CVCS
Valve:	QV062A, QV062B, QV062C
Category:	C
Class:	1
Function:	Boron injection tank to RCS cold leg line check valves
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability quarterly or at cold shutdown (IWV-3521)
Basis for Relief:	The only possible way to verify full-flow operability of these check valves is by using the CVCS charging pump flow through the boron injection tank into the RCS cold legs. However, injecting water into the RCS through the boron injection tank during power operation exposes the safety injection nozzles to thermal shock and interrupts normal charging and letdown. Injection of CVCS charging pump flow at cold shutdown would result in a low temperature overpressurization of the RCS. Verification of full design flow rate operability cannot be done at cold shutdown due to back pressure from the RCS. Verification of full flow operability can only be done at refueling with the RCS depressurized, the reactor vessel head removed, upper internals in place, and the refueling cavity at refueling level. Disassembly of these valves can only be done with the RCS depressurized and the reactor vessel level at mid-plane.
Alternate Testing:	Forward flow operability will be verified by full flow test or by disassembly on a staggered basis at refueling.

RELIEF REQUEST

Q1E21-RV-6

System:	SI/CVCS
Valve:	QV066A, QV066B, QV066C, QV078A, QV078B, QV078C, QV079A, QV079B, QV079C
Category:	C
Class:	1
Function:	Safety injection to the RCS check valves
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability quarterly or at cold shutdown (IWV-3521)
Basis for Relief:	Verification of forward flow operability can only be performed by injecting charging water into the RCS. The charging pumps have insufficient head to overcome normal RCS operating pressure for a full flow test. Partial testing using the charging pumps would inject CVCS water which has bypassed the regenerative heat exchanger and would result in thermal shock to the RCS piping. Verification of full design flow rate operability cannot be done at cold shutdown due to back pressure from the RCS. Verification of full flow operability can only be done at refueling with the RCS depressurized, the reactor vessel head removed, upper internals in place, and the refueling cavity at refueling level. Disassembly of these valves can only be done with the RCS depressurized and the reactor vessel level at mid-plane.
Alternate Testing:	Forward flow operability will be verified by full flow test or by disassembly on a staggered basis at refueling.

RELIEF REQUEST

Q1E21-RV-10

System:	SI/CVCS
Valve:	QV062A, QV062B, QV062C, QV066A, QV066B, QV066C, QV078A, QV078B, QV078C, QV079A, QV079B, QV079C
Category:	C
Class:	1
Function:	Safety injection to the RCS check valve
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability (IWV-3522)
Basis for Relief:	These 2-inch Kerotest check valves are located in the parallel high head injection flow paths to the reactor coolant system. Individual line flow rate cannot be used to verify individual valve operability due to lack of instrumentation.
Alternate Testing:	One of the valves for the reactor coolant system cold legs (QV078 and QV079) and one for the hot legs (QV062 and QV066) will be disassembled and visually inspected on a staggered test basis at each refueling. If visual inspection reveals that the valve is inoperable, the remaining valves in that group (hot leg or cold leg) will be disassembled and visually inspected.

RELIEF REQUEST

Q1E21-RV-11

System:	SI/CVCS
Valve:	QV077A, QV077B, QV077C
Category:	AC
Class:	1
Function:	HHSI to RCS hot leg injection line check valves
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability quarterly or at cold shutdown (IWV-3521)
Basis for Relief:	Disassembly of these valves can only be done with the RCS depressurized and the reactor vessel at mid-plane.
Alternate Testing:	Valves will be disassembled on a staggered basis at refueling.

RELIEF REQUEST

Q1E21-RV-12

System:	SI/CVCS
Valve:	QV115A, QV115B, QV115C
Category:	AC
Class:	2
Function:	CVCS seal injection to RCS pumps.
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability.
Basis for Relief:	These valves must remain open to allow operation of the reactor coolant pumps and these pumps are required to be operable by Technical Specifications prior to entry into mode 3. Technical Specification 3.4.7.2.e requires a total flow of no more than 31 gpm through all three valves. Administrative controls require a flow of at least 6.7 gpm through each valve.
Alternate Testing:	The total flow of less than 31 gpm will be monitored every 31 days per Technical Specifications. If flow drops below 6.7 gpm a plant main control board alarm is actuated and flow is reestablished via annunciator response procedures.

RELIEF REQUEST

Q1E21-RV-13

System:	SI/CVCS
Valve:	QV121A, QV121B, QV121C
Category:	C
Class:	2
Function:	Charging pump min. flow line check valves.
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability.
Basis for Relief:	In verifying full forward flow operability would require measuring the flow rate through each of the charging pump minimum flow lines. Neither the individual minimum flow lines nor the common header is instrumented to measure flow rate.
Alternate Testing:	One of these valves will be disassembled and inspected at refueling on a staggered basis. If disassembly reveals that the valve is inoperable, the remaining valves will be disassembled.

RELIEF REQUEST

Q1E21-RV-14

System:	SI/CVCS
Valve:	QV077A, QV077B, QV077C
Category:	AC
Class:	1
Function:	HHSI to RCS hot leg injection line check valves
ASME Section XI Quarterly Test Requirements:	Verify forward flow operability (IWV-3522)
Basis for Relief:	These 6-inch Velan swing check valves are located in the safety injection lines to the reactor coolant system hot legs. Individual line flow rate cannot be used to verify valve operability due to lack of instrumentation.
Alternate Testing:	One of these valves will be disassembled and manually full stroke tested at each refueling on a staggered test basis. If stroke testing reveals that the valve is inoperable, the remaining valves will be disassembled.