TABLE E-1

TMI UNIT #1

VALVES REQUIRING PERIODIC

INSERVICE INSPECTION

INSERVICE INSPECTION PROGRAM FOR

VALVES AT TMI #1

I. Scope and Objectives

This attachment describes the inservice inspection program for Class 1, 2, and 3 valves in TMI-1. The objective of this program is to provide assurance of the operational readiness of the valves during their service life.

II. Identification of Class Boundaries

The Class 1, 2, and 3 boundaries are established in accordance with the NRC Standard Review Plan Section 3.2.2 (November 24, 1975), ANSI N 18.2A (1975) and Regulatory Guide 1.26, Revision 3. The system boundaries are shown on ISI Drawings C-300-001-GN1 through C-300-005-GN1 and C-300-008-GN1 through C-300-023-GN1. (1)

III. Applicable Code Editions and Addenda

In accordance with 10 CFR 50, paragraph 50.55a(f), the applicable Code Section and Addenda are the 1974 Edition with Addenda through Summer 1975.

IV. Period of Applicability

In accordance with 10 CFR 50, paragraph 50.55a(g)(4)(iv), this program is applicable from September 1, 1979 to April 2, 1981.

V. Inspection Program

The inservice inspection program which is detailed in the attached Table E-1 will be carried out in accordance with ASME Section XI, 1974 Edition, with Addenda through Summer 1975. Specific exceptions to the ASME Code Section XI requirements for selected components are identified in Table E-2 along with the basis for each exception requested. The valves have been categorized as defined in ASME Code Section XI, paragraph IWV-2110.

VI. Revision to Valve Testing Program

This submittal is written as the plant is presently constructed. However, as a result of Unit 1 Restart Change Modification some physical changes will be made to the plant. Therefore, upon completion of these changes and before startup of the Unit a revision will be submitted. Future changes to the Unit's locked valve list will be included when a revision of this submittal is made for other reasons.

(1) J. G. Herbein to R. W. Reid, August 17, 1977.

NOTES TO TABLE E-1

Notes appear in parenthesis in TYPE OF TEST column of Table E-1.

(I) See Request for Relief, Table E-2 Roman Numeral I

(II) See Request for Relief, Table E-2 Roman Numeral II

(III) See Request for Relief, Table E-2 Roman Numeral III

(IV) See Request for Relief, Table E-2 Roman Numeral IV

(V) See Request for Relief, Table E-2 Roman Numeral V

(VI) See Request for Relief, Table E-2 Roman Numeral VI

(VII) See Request for Relief, Table E-2 Roman Numeral VII

(VIII) See Request for Relief, Table E-2 Roman Numeral VIII

(IX) See Request for Relief, Table E-2 Roman Numeral IX

SYMBOLS:

Symbols appear in the following columns of Table E-1:

CLASS - The ISI system classification of the portion of the system in which the valve is located.

CATEGORY - As defined in ASME Code, Section XI, Paragraph IWV-2110.

TYPE OF TEST

T - Full stroke valve exercise and time measurement for power operated valves.

F - Functional check of valve operation.

P - Partial valve stroke exercise. (Partial stroke times will not be measured)

L - Valve seat leak test.

N - None, see Note in parenthesis.

SP - Set point test.

FS - Fail safe test.

Δ - These check valves separate high and low pressure systems and they perform a pressure barrier function insuring that the low pressure system is not subjected to pressures which exceed their design limits. A recent meeting (12-18-79) with the NRC suggested that an alternative to leak rate testing would be acceptable. Therefore, at this time the exact method of testing these valves will remain open. However, test methods will be developed and a functional pressure isolation test will be performed before or during Unit 1 Restart.

E* - Verify and record valve position before operations are performed and after operations are completed, and verify that valve is locked or sealed. ASME Section XI, IWV-3700 prescribes "no regular testing requirements for Category E Valves". However, safety related locked closed valves will be stroked at each refueling outage. These locked closed valves are in alternate flow paths of cooling water of engineered safety systems or are locked closed valves in a cleanup system for containment atmosphere.

E - Verify and record valve position before operations are performed and after operations are completed, and verify that valve is locked or sealed.

TEST FREQUENCY

Q - Quarterly test frequency.

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C - Cold shutdown test frequency (when shutdown exceeds 48 hours and more than 92 days have elapsed since test was performed during last previous shutdown period). This testing will continue until complete or the plant is ready to return to power. Completion of all valve testing will not be a prerequisite to return to power. Any testing not complete at one cold shutdown will be performed at subsequent cold shutdowns. (This is per a NRC staff position presented at meeting on October 18, 1978.)

R - Refueling outage test frequency.

F - Tests of valves are distributed over a 5 year period per ASME Section XI, paragraph IWV-3510(a).

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
AIR HANDLING SYSTEM C-300-011-GN1 C-300-023-GN1	AH-V1A&D	B'FLY	48"	PNEU.	2	A	L/T/FS	R/Q/Q
	AH-V11A/B	3 WAY	5"	DIAPHRAGM	3	B	F($\overline{V}$)	Q

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
CORE FLOODING SYSTEM C-300 004-GN1	CF-V2A/A	GLOBE	1"	MOTOR	2	A	L/T	R/Q
	CF-V4A/B	CHECK	14"	----	1	AC	Δ(II)/F	R/C
	CF-V5A/B	CHECK	14"	----	1	AC	Δ(II)/F	R/C
	CF-V12A/B	CHECK	1"	----	2	AC	L/F(II)	R/C
	CF-V19A/B	GATE	1"	DIAPHRAGM	2	A	L/F(IV)/FS	R/Q/Q
	CF-V20A/B	GATE	1"	DIAPHRAGM	2	A	L/F(IV)/FS	R/Q/Q
	CF-V26A/B	GATE	1"	MANUAL	2	E	----	----
	CF-V30A/B	GLOBE	1"	MANUAL	2	E	----	----
	CF-V3A/B (BREAKER TAGGED OPEN)	GLOBE	1"	MOTOR	2	E	----	----
	CF-V1A/B (BREAKER TAGGED OPEN)	GATE	14"	MOTOR	2	E	----	----

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
CHEMICAL SAMPLING SYSTEM	CA-V1	"Y"GLOBE	1"	MOTOR	1	A	L/T	R/Q
	CA-V2	"Y"GLOBE	1"	PNEU.	1	A	L/F(IV)/FS	R/Q/Q
C-300-005-GN1	CA-V3	"Y"GLOBE	1"	MOTOR	1	A	L/T	R/Q
	CA-V4A/B	"Y"GLOBE	1"	MOTOR	2	A	L/T	R/Q
C-300-021-GN1	CA-V5A/B	"Y"GLOBE	1"	PNEU.	2	A	L/F(IV)/FS	R/Q/Q
	CA-V13	GLOBE	½"	MOTOR	1	A	L/T	R/Q
	CA-V177	CHECK	1"	----	3	C	F	Q
	CA-139	S.W.GATE	2"	PNEU.	2	A	L/F(IV)/FS	R/Q/Q
	CA-V171	DIAPH.	2"	MANUAL	3	E	----	----

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATEGORY	TYPE OF TEST	TEST FREQUENCY
CHILL WATER SYSTEM C-300 011-GN1	CH-V22A/B	CHECK	4"	-----	3	C	F	Q

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
CONDEN-SATE SYSTEM C-300-009GN1	CO-V16A/B	CHECK	10"	-----	3	C	F	Q
	CO-V176	GLOBE	2"	MANUAL	3	E	-----	-----

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
CONTAIN-MENT MONITORING	CM-V1	BALL	1"	PNEU.	2	A	L/F($\overline{IV}$)/FS	R/Q/Q
	CM-V4	BALL	1"	PNEU.	2	A	L/F($\overline{IV}$)/FS	R/Q/Q
C-300 023-GN1								

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
DECAY HEAT CLOSED CYCLE COOLING WATER SYSTEM C-330-003-GN1	DC-V21A/B	GLOBE	2"	MANUAL	3	E	-----	-----
	DC-V23A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V24A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V31A/B	GLOBE	2"	MANUAL	3	E	-----	-----
	DC-V32A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V33A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V34A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V35A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V36A/B	GLOBE	2"	MANUAL	3	E	-----	-----
	DC-V37A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V38A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V39A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V40A/B	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V42A/C	GLOBE	2½"	MANUAL	3	E	-----	-----
	DC-V43A/C	GLOBE	1½"	MANUAL	3	E	-----	-----
	DC-V44A/C	GLOBE	1"	MANUAL	3	E	-----	-----
	DC-V58A/B	GLOBE	3/4"	MANUAL	3	E	-----	-----

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
DECAY HEAT REMOVAL SYSTEM C-300-005-GN1	DH-V1**	GATE	12"	MOTOR	1	B	T(I)	C
	DH-V2	GATE	12"	MOTOR	1	B	T(I)	C
	DH-V3	GATE	12"	MOTOR	2	B	T	Q
	DH-V4A/B	GATE	10"	MOTOR	2	B	T	Q
	DH-V5A/B	GATE	14"	MOTOR	2	B	T	Q
	DH-V6A/B	GATE	14"	MOTOR	2	B	T(I,VIII)	R
	DH-V7A/B	GATE	4"	MOTOR	2	B	T	Q
	DH-V14A/B	CHECK	14"	----	2	C	F	Q
	DH-16A/B	CHECK	10"	----	2	C	F	Q
	DH-V22A/B	CHECK	10"	----	1	C	Δ(II)/F	R/C
	DH-V64	GLOBE	2"	MANUAL	2	AE*	L/F	R/R
	DH-V69	STOP-CK	1½"	MANUAL	2	AE	L/-	R/-
	DH-V12A/B	GATE	12"	MANUAL	2	E*	F	R
	DH-V38A/B	GATE	6"	MANUAL	2	E*	F	R
	DH-V15A/B	GATE	12"	MANUAL	2	E	-	-
	DH-19A/B	DRAG	10	MANUAL	2	E	-	-
	DH-V20A/B	GLOBE	3"	MANUAL	2	E	-	-
	DH-V21	GLOBE	3"	MANUAL	2	E	-	-
	DH-V52	GLOBE	3"	MANUAL	2	E	-	-
	DH-V56A/B	GLOBE	1½"	MANUAL	2	E	-	-
	DH-V62	GLOBE	2"	MANUAL	2	E	-	-
	DH-V63	GLOBE	2"	MANUAL	2	E	-	-
	DH-V68A/B	GLOBE	1"	MANUAL	2	E	-	-

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** During normal plant operations this valve is not accessible; therefore, per IWV-3300 the remote position indicator system will be confirmed at each refueling outage.

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
DECAY HEAT	DR-V1A/B	B'FLY	20"	MOTOR	3	B	T	Q
RIVER WATER	DR-V21A/B	CHECK	1"	----	3	C	F	Q
SYSTEM	DR-V22A/B	CHECK	1"	----	3	C	F	Q
C-300-002-GN1	DR-V6A/B	CHECK	20"	----	3	C	F	Q
AND	DR-V26A/B	CHECK	2"	----	3	C	F	Q
C-300-014-GN1								

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
EMERG. FEED	EF-V3	CHECK	6"	----	3	C	P/P(IX)	Q/C
WATER SYSTEM	EF-V4	GATE	6"	MOTOR	3	B	T(I)/E*	R/R
	EF-V5	GATE	6"	MOTOR	3	B	T(I)/E*	R/R
C-300-009-GN1	EF-V11A/B	CHECK	4"	----	3	C	P(VII)	Q
C-300-010-GN1	EF-V12A/B	CHECK	6"	----	2	C	F(II)	C
	EF-V13	CHECK	6"	----	3	C	P(VII)	Q
	EF-V30A/B	CONTROL	3"	PNEU.	3	B	T/FS	Q/Q
	EF-V10A/B	GATE	4"	MANUAL	3	E	----	----
	EF-V16A/B	GATE	6"	MANUAL	3	E	----	----

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
FLUID BLOCK	FB-V13	CHECK	1/2"	----	2	C	F	Q
	FB-V16	CHECK	3/4"	----	2	C	F	Q
C-300-015-GN1	FB-V17	CHECK	3/4"	----	2	C	F	Q
	FB-V21	CHECK	3/4"	----	2	C	F	Q
	FB-V22	CHECK	3/4"	----	2	C	F	Q
	FB-V23	CHECK	3/4"	----	2	C	F	Q
	FB-V25	CHECK	1/2"	----	2	C	F	Q
	FB-V26	CHECK	3/4"	----	2	C	F	Q
	FB-V27	CHECK	1/2"	----	2	C	F	Q
	FB-V28	CHECK	1/2"	----	1	C	F	Q
	FB-V31	CHECK	3/4"	----	2	C	F	Q
	FB-V34	CHECK	1/2"	----	2	C	F	Q
	FB-V40	CHECK	1/2"	----	2	C	F	Q
	FB-V41	CHECK	1/2"	----	1	C	F	Q
	FB-V42	CHECK	1/2"	----	2	C	F	Q

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
FEED WATER SYSTEM C-300-009-GN1	FW-V12A/B	CHECK	20"	----	2	C	N(X)	-

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
HYDROGEN	HP-V1	GATE	6"	MANUAL	2	AE*	L/F	R/R
PURGE	HP-V6	GATE	6"	MANUAL	2	AE*	L/F	R/R
C-300-023-GN1	HP-V7	GLOBE	3/4"	MANUAL	2	E	-	-

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
INSTRUMENT AIR SYSTEM C-300-023-GN1	IA-V6	GLOBE	2"	MANUAL	2	AE	L/-	R/-
STATION SERVICE AIR SYSTEM C-300-023-GN1	SA-V2	GLOBE	2"	MANUAL	2	AE	L/-	R/-

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
INTER-MEDIATE	IC-V2	GATE	6"	MOTOR	3	A	L/P/T	R/Q/C
COOLING SYSTEM	IC-V3	GATE	6"	PNEU.	2	A	L/P/T/FS*	R/Q/C/Q
	IC-V4	GATE	6"	PNEU.	2	A	L/P/T/FS*	R/Q/C/Q
C-300-022-GN1	IC-V6	GATE	3"	PNEU	2	A	L/P/T/FS*	R/Q/C/Q

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
MAIN STEAM SYSTEM	MS-V1A-D	STOP CHECK	24"	MOTOR	2	BC	P/T	Q/C
	MS-V4A/B	CONTROL	6"	PNEU.	3	B	T/FS	Q/Q
C-300-001-GN1	MS-V6	CONTROL	4"	DIAPHRAGM	3	B	F(V)/FS	Q/Q
	MS-V9A/B	CHECK	6"	----	3	C	F	Q
	MS-V10A/B	GATE	6"	MOTOR	3	B	T(I)	C
	MS-V13A/B	STOP CHECK	2"	DIAPHRAGM	3	B	T/FS	Q/Q
	MS-V17A-D	RELIEF	6"x10"	----	2	C	SP	F
	MS-V18A-D	RELIEF	6"x10"	----	2	C	SP	F
	MS-V19A-D	RELIEF	6"x10"	----	2	C	SP	F
	MS-V20A-D	RELIEF	6"x10"	----	2	C	SP	F
	MS-V21A-D	RELIEF	3"x6"	----	2	C	SP	F
	MS-V2A/B	GATE	12"	MOTOR	2	B	T(I)	C

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
MAKE-UP	MU-V2A/B	GLOBE	2½"	MOTOR	1	A	L/T	R/Q
SYSTEM	MU-V3	GATE	2½"	PNEU.	2	A	L/P/T/FS	R/Q/C/Q
C-300-016-GN1	MU-V12	GATE	4"	MOTOR	2	B	T(I)	C
	MU-V16A-D	GLOBE	2½"	MOTOR	1	B	T	Q
C-300-017-GN1	MU-V18	GATE	2½"	PNEU.	1	A	L/T/FS	R/Q/Q
	MU-V20	GATE	4"	PNEU.	1	A	L/T (I)/FS	R/C/Q
	MU-V25	GLOBE	4"	MOTOR	1	A	L/P/T	R/Q/C
	MU-V26	GATE	4"	PNEU.	2	A	L/P/T/FS	R/Q/C/Q
	MU-V36	GATE	2"	MOTOR	3	B	T	Q
	MU-V37	GATE	1"	MOTOR	3	B	T	Q
	MU-V51	DIAPH.	1"	PNEU.	3	B	F(IV)/FS	Q/Q
	MU-V73A-C	CHECK	3"	----	2	C	F	Q
	MU-V86A/B	CHECK	2½"	----	1	C	F(III)	R
	MU-V94	CHECK	2½"	----	1	C	F	Q
	MU-V95	CHECK	2½"	----	1	C	F(III)	R
	MU-V107B	CHECK	2½"	----	1	C	F	Q
	MU-V107A/C/D	CHECK	2½"	----	1	C	F(III)	R
	MU-V116	CHECK	4"	----	1	AC	L/F	R/Q
	MU-V14A/B	STOP-CK	6"	MOTOR	2	BC	T	Q
	MU-V69A/B	GATE	6"	MANUAL	2	E*	F	Q
	MU-V76A	GLOBE	4"	MANUAL	2	E*	F	Q
	MU-V78	GLOBE	2½"	MANUAL	2	E	-	-
	MU-V75	GLOBE	1"	MANUAL	2	E	-	-
	MU-V64A/B/C	GLOBE	2"	MANUAL	2	E	-	-
	MU-V68A/B	GATE	6"	MANUAL	2	E	-	-
	MU-V72/A/B/C	GATE	6"	MANUAL	2	E	-	-

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
MAKEUP SYSTEM CONTINUED	MU-V74A/B/C	GLOBE	3"	MANUAL	2	E	-	-
	MU-V76B	GLOBE	4"	MANUAL	2	E	-	-
	MU-V77A/B	GLOBE	4"	MANUAL	2	E	-	-
	MU-V113	GLOBE	2½"	MANUAL	1	E	-	-

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
NUCLEAR SERVICE	NR-V1A-C	B'FLY	16"	MOTOR	3	B	T	Q
RIVER WATER SYSTEM	NR-V4A/B	B'FLY	30"	MOTOR	3	B	T	Q
	NR-V20A-C	CHECK	16"	----	3	C	F	Q
	NR-V44A-C	CHECK	2"	----	3	C	F	Q
	NR-V48A	CHECK	1"	----	3	C	F	Q
C-300-002-GN1 AND C-300-014-GN1	NR-V47A-C	CHECK	1"	----	3	C	F	Q
	NR-V45A-C	BALL	2"	PNEU.	3	B	F(IV)	Q

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
NUCLEAR SERVICES	NS-V4	GATE	8"	MOTOR	2	A	L/P/T	R/Q/C
CLOSED COOLING	NS-V10A-C	CHECK	12"	----	3	C	F	Q
	NS-V15	GATE	8"	MOTOR	2	A	L/P/T	R/Q/C
C-300-010-GN1	NS-V35	GATE	8"	MOTOR	3	A	L/P/T	R/Q/C
	NS-V32	GATE	8"	MOTOR	3	B	P/T	Q/C
	NS-V52A/B/C	GATE	1"	PISTON	2	B	T	C
	NS-V53A/B/C	GATE	1"	PISTON	2	B	T	C
	NS-V30A/B	GATE	4"	MANUAL	3	E	-	-
	NS-V31A/B	GLOBE	4"	MANUAL	3	E	-	-
	NS-V69A/B/C	GLOBE	1"	MANUAL	3	E	-	-
	NS-71A/B/C	GLOBE	1"	MANUAL	3	E	-	-
	NS-V76	GATE	3"	MANUAL	3	E	-	-
	NS-V77	GATE	2½"	MANUAL	3	E	-	-
	NS-V78	GLOBE	1½"	MANUAL	3	E	-	-
	NS-V79	GLOBE	1"	MANUAL	3	E	-	-

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
PENETRATION PRESSURI-ZATION SYSTEM C-300-015-GN1	PP-V101	CHECK	1"	----	2	C	F	Q
	PP-V102	CHECK	1"	----	2	C	F	Q
	PP-V133	CHECK	2"	----	2	C	F	Q
	PP-V134	CHECK	2"	----	2	C	F	Q

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
REACTOR BUILDING EMERGENCY COOLING SYSTEM C-300-002-GN1; C-300-010-GN1 AND C-300-014-GN1	RR-V1A/B	B'FLY	16"	MOTOR	3	B	T	Q
	RR-V3A/B/C	GATE	12"	MOTOR	2	B	T	Q
	RR-V4A-D	GATE	12"	MOTOR	2	B	T	Q
	RR-V7A/B	CHECK	16"	-----	3	C	F	Q
	RR-V8A/B	CHECK	20"	-----	3	C	F(III)	R
	RR-V10A/B	CONTROL	2"	DIAPARAGM	3	B	T/FS	Q/Q
	RR-V20A/B	CHECK	1"	-----	3	C	F	Q
	RR-V21A/B	CHECK	1"	-----	3	C	F	Q
	RR-V29A/B	CHECK	2"	-----	3	C	F	Q
	RR-V9A/B/C/D	CHECK	12"	-----	3	C	F(III)	R

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
REACTOR BUILDING	RB-V2	CHECK	8"	----	2	C	F	Q
NORMAL COOLING	RB-V7	GATE	8"	PNEU.	2	A	L/P/T/FS	R/Q/C/R
SYSTEM	RB-V2A	GATE	8"	MOTOR	2	A	L/P/T	R/Q/C
C-300-010-GN1								

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
REACTOR BUILDING SPRAY SYSTEM	BS-V1A/B	"Y"GLOBE	8"	MOTOR	2	B	T	Q
	BS-V2A/B	GATE	4"	MOTOR	2	B	T	Q
	BS-V3A/B	GATE	10"	MOTOR	2	B	T	Q
C-300 012-GN1	BS-V4A/B	GATE	4"	MOTOR	2	B	T	Q
	BS-V21A/B	CHECK	4"	----	2	C	F	Q
	BS-V23A/B	CHECK	10"	----	2	C	F	Q
	BS-V30A/B	CHECK	8"	----	2	C	P($\overline{IX}$)	Q
	BS-V52A/B	CHECK	4"	----	2	C	F	Q
	BS-V25A/B	GATE	10"	MANUAL	2	E*	F	R
	BS-V17A/B	GATE	4"	MANUAL	2	E	-	-
	BS-V37/A/B/C/D	GLOBE	3/4"	MANUAL	2	E	-	-
	BS-V41A/B	GATE	8"	MANUAL	2	E	-	-
	BS-V49A/B	GATE	4"	MANUAL	2	E	-	-
	BS-V53A/B	GATE	4"	MANUAL	2	E	-	-
	BS-V54/A/B	GATE	4"	MANUAL	2	E	-	-
	BS-V59	GATE	6	MANUAL	2	E	-	-
	BS-V60A/B	GATE	6	MANUAL	2	E	-	-

TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
REACTOR COOLANT	RC-V1**	GLOBE	2½"	MOTOR	1	B	P/F	Q/C
SYSTEM	RC-V4	"Y"GLOBE	2½"	MOTOR	1	B	T(I)	C
C-300-019-GN1	RC-V23	CHECK	2½"	----	1	C	F(II)	C
	RC-RV1A/B	RELIEF	2½"	----	1	C	SP	F
	RC-RV2**	RELIEF	2½"	SOLENOID	1	C	SP	F
	RC-V2**	GLOBE	2½"	MOTOR	1	B	T	Q
	RC-V3**	GLOBE	2½"	MOTOR	1	B	T(I)	C

** During normal plant operations these valves are inaccessible; therefore, per IWV-3300 the remote position indicator system will be confirmed at each refueling outage.

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
SCREEN WASH AND SLUICE SYSTEM C-300-014-GN1	SW-V3A/B	CHECK	10"	-----	3	C	F	Q
	SW-V4A/B	CHECK	6"	-----	3	C	F(IV)	Q
	SW-V11A/B	BALL	2"	PNEU.	3	B	F	Q
	SW-V14A/B	CHECK	1"	-----	3	C	F	Q
	SW-V13A/B	CHECK	1"	-----	3	C	F	Q
	SW-V20A/B	CHECK	1"	-----	3	C	F	Q
	SW-V19A/B	CHECK	1"	-----	3	C	F	Q
	SW-V24A/B	CONTROL	4"	PNEU.	3	B	F	Q
	SW-V27A/B	CHECK	2"	-----	3	C	F	Q
	SW-V28A/B	CHECK	2"	-----	3	C	F	Q
	SW-V17A/B	BALL	2"	PNEU.	3	B	F(IV)	Q

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
SPENT FUEL COOLING SYSTEM C-300-018-GN1	SF-V23	GATE	8"	MANUAL	2	AE	L/-	R/-

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
WASTE DISPOSAL GAS C-300-023-GN1	WDG-V4	GATE	2"	DIAPH.	2	A	L/F(IV)/FS	R/Q/Q

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TMI NO. 1

VALVES REQUIRING PERIODIC IN-SERVICE INSPECTION

SYSTEM	VALVE NO.	TYPE	SIZE	OPERATOR	CLASS	CATE-GORY	TYPE OF TEST	TEST FREQUENCY
WASTE DISPOSAL LIQUID SYSTEM C-300-021-GN1	WDL-V49	DIAPH.	1½"	DIAPH.	3	B	F(IV)/FS	Q/Q
	WDL-V50	DIAPH.	1½"	DIAPH.	3	B	F(IV)/FS	Q/Q
	WDL-V89	DIAPH.	2"	DIAPH.	3	B	F(IV)/FS	Q/Q
	WDL-V90	DIAPH.	2"	DIAPH.	3	B	F(IV)/FS	Q/Q
	WDL-V91	DIAPH.	2"	DIAPH.	3	B	F(IV)/FS	Q/Q
	WDL-V92	DIAPH.	2"	DIAPH.	3	B	F(IV)/FS	Q/Q
	WDL-V304	GATE	3"	PNEU.	2	A	L/T/FS	R/Q/Q
	WDL-V353	CHECK	1½"	-----	3	C	F	Q
	WDL-V354	CHECK	1½"	-----	3	C	F	Q
	WDL-V361	CHECK	1"	-----	3	C	F	Q
	WDL-V534	GATE	6"	PISTON	2	A	L/T	R/Q
	WDL-V535	GATE	6"	PISTON	2	A	L/T/FS	R/Q/Q
	WDL-V61	DIAPH.	1"	DIAPH.	3	B	F(IV)	Q
	WDL-V62	DIAPH.	1"	DIAPH.	3	B	F(IV)	Q

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TABLE E-2

TMI UNIT #1

REQUEST FOR RELIEF FROM VALVE

INSERVICE INSPECTION PROGRAM

GENERIC REQUEST FOR RELIEF

(Applies to all valves listed in Table E-1)

A. Corrective Action for Inoperative Valves

1. Valve Identification

All the Class 1, 2, and 3 valves identified in Table E-1, TMI No. 1 Valves Requiring Periodic Inservice Inspection.

2. ASME Code Section XI Requirement From Which Relief is Requested

Corrective action for inoperable valves require condition be corrected before unit startup from a cold shutdown condition in accordance with paragraphs IWV-3410(g) and IWV-3520(c).

3. Basis for Requesting Relief

Constraints and limits on plant startup with an inoperable valve depend on many specific plant design features and conditions. The limiting conditions for startup and operation have been analyzed and are described in the TMI No. 1 Technical Specifications.

4. Alternative to ASME Code Section XI Requirements

Inoperable valves will be evaluated considering the TMI No. 1 Technical Specifications to determine when an inoperable valve will limit plant startup from a cold shutdown condition.

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SPECIFIC REQUESTS FOR RELIEF

I. Category A and B Valves Which Will Not Be Part-Stroked During Power Operations

1. Valve Identification

Valve Name and Function	Valve Number	Class	Category
Decay Heat Suction From Loop "B"	DH-V1	1	B
Decay Heat Suction From Loop "B"	DH-V2	1	B
Reactor Building Sump Suction Valve	DH-V6A/B	2	B
Make-Up Tank Suction Isolation Valve	MU-V12	2	B
Reactor Coolant Pump Seal Water Isolation Valve at Containment Vessel	MU-V20	1	A
Pressurizer Spray Line	RC-V3	1	B
Decay Heat Injection Line Isolation Valve	RC-V4	1	B
Emergency Feedwater to Emergency Feedwater Pumps	EF-V4	3	B
Emergency Feedwater to Emergency Feedwater Pumps	EF-V5	3	B
Emergency Feedwater Pump Steam Supply	MS-V10A/B	2	B
Steam Damp Header Supply	MS-V2A/B	2	B

2. ASME Code Section XI Requirement From Which Relief is Requested

Relief is requested from paragraph IWV-3410(b)(1) which states that if only limited operation is practical during plant operation the valve shall be part-stroke exercised during plant operation and full-stroked during each cold shutdown.

3. Basis for Requesting Relief

All of the above listed valves are not designed with a part-stroke capability and any error in the frequent part-stroke testing of the valve could jeopardize the continued safe operation of the plant.

DH-V1 and DH-V2 are in the decay heat outlet line and part-stroking them could overpressurize downstream piping. See NRC letter to

Met-Ed dated November 17, 1976, Enclosure 2, paragraph 3.

DH-V6A/B isolates the Reactor Building Sump from the Decay Heat System and if DH-V6A or B failed in the open position during the cycling test this would cause the loss of the respective Decay Heat Pump and Cooler. This would put the plant in an unsafe condition. See NRC letter to Met-Ed dated Novebmer 17, 1976, Enclosure 2, paragraph 1.

MU-V12 isolates the Make-up Tank from the suction of the Make-up Pumps. Part-stroking this valve during normal plant operation would jeopardize the continued operation of the running Make-up Pump if this valve completely closed due to valve operator malfunction. Likewise, part-stroking MU-V20 would jeopardize the continued operation of the Reactor Coolant Pumps, since this valve supplies seal injection water to the Reactor Coolant Pumps.

RC-V3 is the block valve for the pressurizer spray line. Part-stroking RC-V3 during normal operation would jeopardize the ability to spray the pressurizer and reduce pressure if RC-V3 stuck closed.

RC-V4 will not be part-stroked during normal plant operation in that downstream Decay Heat Piping may be overpressurized by the Reactor Coolant System pressure. See NRC letter to Met-Ed dated November 17, 1976, Enclosure 2, paragraph 3.

The testing of EF-V4 and EF-V5 will introduce river water, silt and corrosives into the suction piping of the three Emergency Feedwater Pumps. This is unacceptable from a chemistry control standpoint for normal operations. In order to flush the river water the suction valves of the Emergency Feedwater Pumps must be closed while performing the flushing operation. This would render the Emergency Feedwater Pumps inoperable during the flushing operation. Also, these valves are chained and locked shut and the breakers for these valves are open at the 480 volt power supply. Essentially this means that these valves are not normally power activated.

MS-V13A/B and MS-V10A/B function to supply steam from the Steam Generators to the Turbine Driven Emergency Feedwater Pump (EF-P1). MS-V13A/B functions to supply steam at or above T_{avg} of 525^{0}F. MS-V10A/B is a larger valve and by design supplies steam to EF-P1 at or below T_{avg} of 200^{0}F. To preclude the possibility of overspeeding and tripping EF-P1 (due to a sudden inrush of a large quantity of high pressure steam) MS-V10A/B will only be tested at cold shutdowns.

MS-V2A and B isolate the six turbine bypass valves. MS-V2A isolates three turbine bypass valves and likewise MS-V2B isolates the remaining three turbine bypass valves. Technical Specification Number 3.4.1 requires four of the six turbine bypass valves to be operable. If MS-V2A/B stuck closed during a quarterly test this would limit the ability of the plant to cooldown. Normal cooldown decay heat removal is by the steam generator through MS-V2A/B to the turbine bypass valves and then to the condenser.

4. Alternative to ASME Code Section XI Requirements

Per IWV-3410(b)(1) each of the above valves will be full-stroke tested during plant cold shutdown exceeding 48 hours in duration and more than 92 days have elapsed since the previous valve tests.

II. Category C Valves Which Will Not Be Part-Stroked During Normal Oerations

1. Valve Identification

Valve Name and Function	Valve Number	Class	Category
Core Flooding Tanks Check Valves - Discharge	CF-V4A/B	1	C
Core Flooding Tanks Check Valves - Discharge	CF-V5A/B	1	C
Core Flooding Tanks Make-Up Isolation Valve	CF-V12A/B	2	C
Decay Heat Discharge Into Core Flooding Lines	DH-V22A/B	1	C
Decay Heat Injection Valve	RC-V23	1	C
Emergency Feedwater Pump Discharge to Steam Generators	EF-V12A/B	2	C

2. ASME Code Section XI Requirement From Which Relief is Requested

Relief is requested from paragraph IWV-3520(b) which states that if only limited operation is practical during plant operation the check valve shall be part-stroke exercised during plant operation and full-stroked during each cold shutdown.

3. Basis for Requesting Relief

During normal reactor operation the Reactor Coolant System is at a much higher pressure than the Core Flooding System and Decay Heat System; therefore, it is not possible to exercise CF-V4A/B, CF-V5A/B, DH-V22A/B and RC-V23. See NRC letter to Met-Ed dated November 17, 1976, Enclosure 2, paragraph 3.

Testing CF-V12A/B involves changing the position of other valves (CF-V28A/B) that are listed in Operating Procedure Number 1101-3, "Containment Integrity and Access Limits". Per 1101-3 the position of CF-V28A/B may not be changed during normal reactor operation.

Due to the design restrictions on the number of thermal cycles (40 cycles at 40°F feedwater), the emergency feedwater nozzles can undergo it is prudent not to exercise EF-V12A/B by charging through the emergency feed header while in normal operation.

4. Alternative to ASME Code Section XI Requirement

Each of the above valves except EF-V12A/B will be full-stroke exercised during plant cold shutdowns exceeding 48 hours in duration when more than 9 months have elapsed since the previous test. See Request for Relief Roman Numeral VI for EF-V12A/B.

III. Category C Valves Which Will Be Tested Only During Refueling Outages

1. Valve Identification

Valve Name and Function	Valve Number	Class	Category
High Pressure Injection Check Valves	MU-V86A/B	1	C
High Pressure Injection Check Valves	MU-V95	1	C
High Pressure Injection Check Valves	MU-V107A/C/D	1	C
River Water to Reactor Building Cooling Units	RR-V8A/B	3	C
Reactor Building Coil Outlet	RR-V9A/B/C/D	3	C

2. ASME Code Section XI Requirement From Which Relief is Requested

Paragraph IWV-3520(b) states that normally closed check valves that cannot be operated during normal plant operation shall be full-stroke exercised during each cold shutdown. In case of frequent cold shutdowns these valves need not be excercised more often than once every 9 months.

3. Basis for Requesting Relief

a. Although MU-V107B and MU-V94 are normally open during normal plant operation, the remainder of the above High Pressure Injection Check Valves cannot be operated during normal operation or at each cold shutdown because o the limited number (40) of allowable thermal cycles on the high pressure injection nozzles.

b. During the functional test of RR-V8A/B and RR-V9A/B/C/D river water, silt and corrosives are introduced into the Reactor Building Emergency Cooling Coils. After the test these cooling coils must be first drained and then flushed with Nuclear Service Closed Cooling Water. The drain and flush water is drained to the Reactor Building Sump and this produces large quantities of water that must be processed through the liquid waste disposal system. Therefore, per Technical Specification 4.5.2 these check valves will continue to be tested on a refueling frequency (approximately every 12 months) instead of every 9 months.

4. Alternative to ASME Code Section XI Requirements

Each of these valves will be full-stroke exercised during each refueling shutdown.

IV Small Bore Air Operated Valve Stroke Times

1. Valve Identification

All Class 1, 2, and 3 air operated valves 2" and less are identified in Table E-1, TMI Number 1 Valves Requiring Periodic Inservice Inspection.

2. ASME Code Section XI Requirement From Which Relief is Requested

Paragraph IWV-3410(c)(2) which states that the stroke time for all power-operated valves shall be measured to the nearest second or 10% of the maximum allowable stroke time, whichever is less whenever such a valve is full-stroke tested.

3. Basis for Requesting Relief

Air operated valves 2" and less have full-stroke times usually less than one second. Thus, the valve stroke time cannot effectively be measured using normal test equipment such as a stopwatch. Also it is considered impractical to reliably measure changes in valve stroke times for valves which stroke open or closed in less than one (1) second. For very short stroke times, the variation in measured stroke times can be a large fraction of the established stroke time limit. Thus it is not practical to meaningfully identify or evaluate the stroke time changes considering human reaction times and the normal timing equipment used.

4. Alternative to ASME Code Section XI Requirements

Air operated valves 2" and less will be tested to ensure their operational readiness as required by Section XI; however, the valve full-stroke time will not be recorded for these valves.

V Full-Stroke Exercising of Control Valves

1. Valve Name and Function	Valve Number	Class	Category
Main Steam to Emergency Feedwater Pump	MS-V10 A/B	3	B
EFPT Steam Pressure Regulators	MS-V6	3	B
Control Bldg. Vent. Unit Cooling Coil Discharge	AH-V11 A/B	3	B

2. ASME Code Section XI Requirement From Which Relief is Requested

Relief is requested from paragraph IWV-3410(c)(2) which states that the stroke time for all power-operated valves shall be measured to the nearest second or 10% of the maximum allowable stroke time, whichever is less, whenever such a valve is full-stroke tested.

3. Basis for Requesting Relief

These valves are temperature and pressure controlled valves whose operators depend on changes in temperature or flow/pressure to initiate valve operation or change in position. There is no practical way to determine exactly when a normally open control valve starts to close and during normal operation the valve may be only partially open which would not be a full-stroke test. Thus, the time test results for these valves will not be repeatable even though the valve operates as required.

4. Alternative to ASME Code Section XI Requirements

Each of the control valves will be functionally tested on a quarterly basis to ensure they operate as required; however, the valve full-stroke time will not be recorded.

VI Valves That Will Be Tested Only When Cold Shutdown Extends More Than 31 Days

1. Valve Identification

Valve Name and Function	Valve Number	Class	Category
Emergency Feedwater to Steam Generators	EF-V12A/B	2	C

2. ASME Code Section XI Requirement From Which Relief is Requested

Relief is request from paragraph IWV-3520(b) which states that if only limited operation is practical during plant operation the check valve shall be part-stroke exercised during plant operation and full-stroked during each cold shutdown.

3. Basis for Requesting Relief

EF-V12A/B will be tested only when cold shutdown extends more than 31 days in order to minimize the introduction of highly oxygenated water into the Steam Generators from the Condensate Storage Tanks. This oxygenated water will deteriorate the Steam Generators tubes due to stress corrosion if this test is performed more often than when cold shutdown extends more than 31 days.

4. Alternative to ASME Code Section XI Requirement

Each of these valves will be tested when cold shutdown extends more than 31 days.

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VII Valves That Will Be Part Stroked Each Quarter and Full Stroked When Cold Shutdown Extends More Than 31 Days

1. Valve Identification

Valve Name and Function	Valve Number	Class	Category
Motor Driven Emergency Feedwater Pump Discharge Check Valve	EF-V11A/B	3	C
Turbine Driven Emergency Feedwater Pump Discharge Check Valve	EF-V13	3	C

2. ASME Code Section XI Requirement From Which Relief is Requested

Relief is requested from paragraph IWV-3520(b) which states that if only limited operation is practical during plant operation the check valve shall be part-stroke exercised during plant operation and full-stroked during each cold shutdown.

3. Basis for Requesting Relief

EF-V11A/B and EF-V13 will be full stroke tested only when cold shutdown extends more than 31 days in order to minimize the introduction of highly oxygenated water into the Steam Generators from the Condensate Storage tanks. This oxygenated water may cause deterioration of the Steam Generators tubing due to corrosion if this test is performed more often than when cold shutdown extends more than 31 days.

4. Alternative to ASME Code Section XI Requirement

Each of these valves will be part-stroke tested each quarter and will be full-stroke tested during each cold shutdown which extends more than 31 days.

VIII Valves That Will Be Tested Only During Refueling Outages

1. Valve Identification

Valve Name and Function	Valve Number	Class	Category
Reactor Bldg. Sump Recir. Suction	DH-V6A/B	2	B

2. ASME Code Section XI Requirement From Which Relief is Requested

Relief is requested from paragraph IWV-3410(b)(1) which states that normally closed valves that cannot be operated during normal plant operation shall be full-stroke exercised during each cold shutdown.

3. Basis for Requesting Relief

DH-V6A/B is located outside the Reactor Building and this valve isolates the Reactor Building Sump from the LPI and HPI systems.

The piping from the Reactor Building Sump to DH-V6A/B slopes toward DH-V6A/B. The "A" side slopes 9 inches and is approximately 35 ft. in length and the "B" side slopes 5 inches and is approximately 21 ft. in length. Therefore, if DH-V6A/B were cycled frequently, this would admit large amounts of corrosives and "dirty" water into the LPI/HPI systems.

4. Alternatives to ASME Code Section XI Requirement

DH-V6A/B will be stroke time tested at refueling outages.

IX Valves That Will Be Only Given a Part-stroke Test

1. Valve Identification

Valve Name and Function	Valve Number	Class	Category
Reactor Bldg. Spray Header Check Valve	BS-V30A/B	2	C
Emergency Feedwater to Emergency Feedwater Pumps	EF-V3	3	C

2. ASME Code Section XI Requirement From Which Relief is Requested

Relief is requested from paragraph IWV-3520(b) which states if only limited operation is practical during plant operation the check valve shall be part-stroke exercised during plant operation and full-stroked during each cold shutdown.

3. Basis for Requesting Relief

The full stroke of BS-V30A/B would require initiation of Reactor Building Spray. This would entail spraying the Reactor Building with borated water. The full stroke of EF-V3 would supply river water to the suction piping of the three Emergency feedwater Pumps. This is not acceptable from a chemistry control standpoint during non-emergency operation.

4. Alternative to ASME Code Section XI Requirement

Each of the above valves will be part-stroked test during each quarter.

X Valves Which Will Not Be Tested

1. Valve Identification

Valve Name and Function	Valve Number	Class	Category
Feed Water to O.T.S.G. Check Valve	FW-V12 A/B	2	C

2. ASME Code Section XI Requirement From Which Relief is Requested

Relief is requested from paragraph IWV-3520(b) which states that check valves that cannot be operated during normal plant operation shall be part-stroked during plant operations and shall be full-stroke exercised during each cold shutdown.

3. Basis for Requesting Relief

Check Valves FW-V12 A and B are normally open during plant operations to provide feedwater flow to the steam generators. However, there is no practical way to test the valves closed when feedwater flow stops or the plant is in cold shutdown.

4. Alternative to ASME Code Section XI Requirements

As discussed above, there are no safe, practical ways to test the installed check valves closed and no alternate plans to test the valves are considered feasible.