

April 17, 1980

Revision No. 4 to Prairie Island ASME Code Section XI Inservice Inspection
and Testing Program and Information Required for NRC Review of Requests
for Relief from ASME Code Section XI Requirements, dated February 1, 1978

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8004230 487

NORTHERN STATES POWER COMPANY

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

DOCKET NOS. 50-282 LICENSE NOS. DPR-42
 50-306 DPR-60

ASME CODE SECTION XI INSERVICE INSPECTION AND TESTING PROGRAM

AND

INFORMATION REQUIRED FOR NRC REVIEW OF REQUESTS FOR RELIEF FROM
ASME CODE SECTION XI REQUIREMENTS

SUBMITTED: February 1, 1978

REVISED: Revision 1
 September 15, 1978

Revision 2
 June 8, 1979

Revision 3
 September 19, 1979

Revision 4
 April 17, 1980

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SECTION 1 UNIT NO. 1 AND COMMON COMPONENTS

This section contains a description of our proposed program of inservice inspection and testing of components in Unit No. 1 of the Prairie Island Nuclear Generating Plant and components in systems common to both Unit No. 1 and Unit No. 2. This program conforms to the requirements of 10 CFR 50, Section 50.55a(g).

The information presented in this section follows the recommendations contained in a letter dated November 24, 1976 from Mr D L Ziemann, Chief, Operating Reactors Branch #2, Division of Operating Reactors, USNRC, and in a letter dated January 16, 1978 from Mr D K Davis, Acting Chief, Operating Reactors Branch #2. The program is updated as required by changes to Section 50.55a(g) published in the Federal Register on October 7, 1979.

Inservice inspection and testing requirements are updated at 120 month intervals to conform to the latest edition and addenda of Section XI of the ASME Code referenced in paragraph (b) of 10 CFR 50, Section 50.55a. This manual will be updated each time changes are made to the inservice inspection and testing program. Deviations from Code requirements are also documented for NRC Staff review in this manual.

The program description is arranged in the following manner:

Nondestructive Examination

Class 1	- Section 1.1.1
Class 2	- Section 1.1.2
Class 3	- Section 1.1.3
Pressure Tests	- Section 1.2
Inservice Tests of Pumps	- Section 1.3
Inservice Tests of Valves	- Section 1.4
Deviations from Section XI Requirements	- Section 1.5

Proposed changes to the Technical Specifications which implement this program on Unit No. 1 and common components were submitted to the Commission on October 15, 1976. A summary of these proposed changes is contained in Section 3 of this report.

System drawings showing ASME Code classification boundaries are included in Section 4 of this report. These drawings are used to define pressure test boundaries and identify those Class 3 components subject to visual inspection as part of the nondestructive examination program.

ASME Section XI Nondestructive Examination Program (Class 1) - Unit, No. 1 and Common Components

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: April 16, 1977 to December 16, 1983

NOTES:

1. The following tables identify the specific Class 1 components and parts to be examined. These tables can be directly correlated with Table IWB-2500 and Table IWB-2600 of Section XI and identify the examination method for each listed item. The inspections that were performed during the first forty (40) months of operation are included. The tables show the amount of items required to be examined for each period and the corresponding percentage that will have been completed by the end of that period.
2. Repairs will be performed in accordance with the applicable requirements of the latest edition and addenda of the ASME Code, Section XI. However, if rules for a particular repair are not specified in Section XI, the original design specification and Construction Code of the component or system, or later editions of the Construction Code or ASME Code Section III, either in their entirety or portions thereof, may be used.

LEGEND:

Examination method:

- V - visual
- U.T. - ultrasonic
- R.T. - radiography
- S - surface examination, either liquid penetrant or magnetic particle

Inspection Period

- ONE - December 16, 1973 to April 16 1977
- TWO - April 16, 1977 to August 16, 1980
- THREE - August 16, 1980 to December 16, 1983

1.1.1-1

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ASME Section XI Nondestructive Examination Program (Class 2) - Unit No. 1 and Common Components

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: April 16, 1977 to December 16, 1983

NOTES:

1. The following tables identify the specific Class 2 components and parts to be examined. These tables can be directly correlated with Table IWC-2520 and Table IWC-2600 of Section XI and identify the examination method for each listed item. The tables identify the number of items required to be examined over a forty (40) year service lifetime, and the amount required for a ten (10) year inspection interval. The inspections that were performed during the first forty (40) months of operation are included, along with the corresponding percentage that was completed. The tables also show the amount of items required to be examined during each period, and the percentage that will have been completed by the end of that period.
2. The scope of the inspection program for Class 2 components was based on the exemption criteria of IWC-1220.
3. In accordance with the requirements of IWC-2411 the nondestructive examinations were selected so that the total examinations completed over forty (40) years will be 100% of the required examinations of the system or portions of the systems with a single stream or be equivalent to having performed 100% of the required examinations in one of the streams of a multiple stream system. The selection of pressure retaining bolting for valves was based on the type, manufacturer, and design of valve and not on the total number of certain size valve bonnet bolts per system.
4. Repairs will be performed in accordance with the applicable requirements of the latest edition and addenda of the ASME Code, Section XI. However, if rules for a particular repair are not specified in Section XI, the original design specification and Construction Code of the component or system, or later editions of the Construction Code or ASME Code Section III, either in their entirety or portions thereof, may be used.

LEGEND:

Examination method:

- V - visual
- U.T. - ultrasonic
- R.T. - radiography
- S - surface examination, either liquid penetrant or magnetic particle

Inspection Period

- ONE - December 16, 1973 to April 16, 1977
- TWO - April 16, 1977 to August 16, 1980
- THREE - August 16, 1980 to December 16, 1983.

1.1.2-1

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4/17/80

ASME Section XI Nondestructive Examination Program (Class 3) - Unit No. 1 and Common Components

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: April 16, 1977 to December 16, 1983

NOTES:

1. The classification diagrams identify the systems that are required for examination in accordance with IWD-2000.
2. The scope of the inspection program for Class 3 components is based on the classification of the plant's inspection boundaries and exemptions as allowed for in IWD-2600 and IWD-5200. The inspection program is in accordance with IWD-2400 (Inspection Schedule).
3. Visual examination will be conducted for evidence of component leakage, structural distress, or corrosion when the system is undergoing either a system inservice test, component functional test, or a system pressure test.
4. Supports and hangers for components will be visually examined to detect any loss of support capability or evidence of inadequate restraint.
5. Repairs will be performed in accordance with the applicable requirements of the latest edition and addenda of the ASME Code, Section XI. However, if rules for a particular repair are not specified in Section XI, the original design specification and Construction Code of the component or system, or later editions of the Construction Code or ASME Code Section III, either in their entirety or portions thereof, may be used.

LEGEND:

Inspection Period

- ONE - December 16, 1973 to April 16, 1977
TWO - April 16, 1977 to August 16, 1980
THREE - August 16, 1980 to December 16, 1983

1.1.3-1

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ASME Section XI Pressure Testing Program - Unit No. 1 and Common Components

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: April 16, 1977 to December 16, 1983

The system Code Class boundaries are established on the attached ASME Code Classification Drawings, Sheets 2 through 40. The Pressure Test Program for the Class 1, 2, and 3 systems is as follows:

ASME CODE CLASS	TEST TYPE	TEST FREQUENCY	TEST SPECIFICATION	REQUEST FOR RELIEF
1	Leakage	refueling	IWB-5210(a) IWB-5221 IWA-5000	#20, #60
	Hydrostatic	10 years	IWB-5210(b) IWB-5222 IWA-5000	#20
2	Pressure	10 years	IWC-2412 IWC-2510	#19, #20, #29
3	Pressure	10 years	IWD-2410(b)	#20, #28, #30, #31

1.2-1

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ASME Section XI Pump Testing Program - Unit No. 1 and Common Components

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: April 16, 1977 through December 16, 1983

The attached sheet identifies the Unit 1 and common system pumps that are subject to the testing requirements of Section XI, Subsection IWP

LEGEND:

Test Frequency

- M = monthly
- 2M = every other month
- Y = 12 month

Test Parameter

- Pi = inlet pressure
- Vv = vibration velocity
- Q = flowrate
- Pd = discharge pressure
- N = speed
- Tb = bearing temperature
- L = level

SECTION 3 INSERVICE TESTING OF PUMPS

1.3-1

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ASME Section XI Valve Testing Program - Unit No. 1 and Common Components

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: April 16, 1977 through December 16, 1983

NOTES:

1. The following sheets identify the unit 1 and common system valves that are subject to the testing requirements of Section XI, Subsection IWV. Valves in Code Class 1, 2 and 3 systems have been categorized in accordance with IWV-2110, subject to the exclusions of IWV-1300, using the following criteria.
 - a) The program has been limited to those Code Class 1, 2 and 3 valves that must function to prevent the occurrence of or mitigate the consequences of an analyzed accident contained in the FSAR.
 - b) Containment isolation valves are considered category A valves and are leak tested in accordance with the plant Technical Specification. Category A valves are exercised in accordance with IWV 3410, except where relief is requested. Containment isolation valves which are appendages of the containment vessel and are not connected to any other Code Class 1, 2 or 3 piping systems are not shown on code class drawings.
 - c) Code Class 1, 2 and 3 valves whose system safety function is adequately tested by the Technical Specification containment isolation valve testing program have also been omitted from the Section XI Valve Testing Program.

There are no partial stroke exercise tests in the program.

2. LEGEND

Test Type:

E = exercise
SP = relief valve setpoint verification
L = valve lineup check
LT = leak test

Test Frequency:

M = monthly
Q = quarterly
R = refueling
CS = cold shutdown
5y = 5 years
S = startup
2W = every other week
2M = every other month
CU = core unload

NOTE: Inservice valve testing at cold shutdown is defined as: Valve testing should commence not later than 48 hrs after shutdown and continue until complete or plant is ready to return to power. Completion of all valve testing is not a prerequisite to return to power. Any testing not completed at one cold shutdown should be performed during the subsequent cold shutdowns to meet the code specified testing frequency.

1.4-1

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ASME CODE VALVES

SYS	FLOW DIAGRAM	VALVE NO	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
SI	X-HIAW-1-44	MV-32069	8	1 SAF INJ REAC VSL INJ ISOL A	B	SP-1137	E	R	#8
SI	X-HIAW-1-44	MV-32067	8	1 SAF INJ REAC VSL INJ ISOL B	B	SP-1137	E	R	#8
SI	X-HIAW-1-44	MV-32065	8	1 REAC VSL INJ FR RH EXCH ISOL	B	SP-1167	E	CS	#62
SI	X-HIAW-1-44	MV-32077	8	11 CNTMT SMP B ISOL B-1	B	SP-1137	E	R	#8
SI	X-HIAW-1-44	MV-32078	8	11 CNTMT SMP B ISOL B-2	B	SP-1137	E	R	#8
SI	X-HIAW-1-44	SI-25-1	8	11 ACCUMULATOR RELIEF	C	SP-1154(3)	SP	5Y	
SI	X-HIAW-1-44	SI-25-2	8	12 ACCUMULATOR RELIEF	C	SP-1154(3)	SP	5Y	
SI	X-HIAW-1-44	SI-26-1	8	RH EXCHANGER TO REACTOR VESSEL RELIEF	C	SP-1154(3)	SP	5Y	
SI	X-HIAW-1-44	SI-6-3	8	11 ACCUMULATOR OUTLET CHECK VALVE	C	SP-1092A	E	R	#5, #7
SI	X-HIAW-1-44	SI-6-4	8	11 ACCUMULATOR OUTLET CHECK VALVE	C	SP-1092A	E	R	#5, #7
SI	X-HIAW-1-44	SI-16-5	8	LOOP A COLD LEG INJECTION CHECK VALVE	C	SP-1092A	E	R	#7
SI	X-HIAW-1-44	SI-9-2	8	LOOP A COLD LEG INJECTION CHECK VALVE	C	SP-1092A	E	R	#5, #7
SI	X-HIAW-1-44	SI-16-7	8	RX VESSEL INJECTION LINE CHECK VALVE	C	SP-1092A	E	R	#7
SI	X-HIAW-1-44	SI-6-1	8	12 ACCUMULATOR OUTLET CHECK VALVE	C	SP-1092A	E	R	#5, #7
SI	X-HIAW-1-44	SI-6-2	8	12 ACCUMULATOR OUTLET CHECK VALVE	C	SP-1092A	E	R	#5, #7
SI	X-HIAW-1-44	SI-16-4	8	LOOP B COLD LEG INJECTION CHECK VALVE	C	SP-1092A	E	R	#7

ASME CODE VALVES

SYS	FLOW DIAGRAM	VALVE NO.	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
SI	X-HIAW-1-44	MV-32074	8	1 SAF INJ REAC VSL INJ ISOL	A	SP-11137	E	R	#8
SI	X-HIAW-1-44	MV-32073	8	1 REAC SAF INJ COLD LEG ISOL	E	SP-1072-28A	LT	R	
SI	X-HIAW-1-44	MV-32075	8	11 CNTMT SMP B ISOL A-1	A	CI.1.118-1	L	S	#57
SI	X-HIAW-1-44	MV-32076	8	11 CNTMT SMP B ISOL A-2	A	SP-1072-28B	LT,E	R	#8, #16
SI	X-HIAW-1-44	CV-31440	N/A	N2 SUPPLY TO ACC CNTMT ISOL	A	SP-11137	E	R	#8, #16
SI	X-HIAW-1-44	CV-31242	N/A	N2 SUPPLY TO ACC HCV	A	SP-1072-30B	LT	R	#57
SI	X-HIAW-1-44	CV-31441	8	N2 SUPPLY TO 11 ACC ISOL	A	SP-1072-31	E	R	#57
SI	X-HIAW-1-44	CV-31444	8	N2 SUPPLY TO 12 ACC ISOL	A	SP-1072-31	LT	R	#57
SI	X-HIAW-1-44	MV-32064	8	1 REAC VSL INJ FR RH	A	SP-1072-31	E	R	#57
						SP-1167	E	CS	#62
						SP-1072-48	LT	R	

ASME CODE VALVES

SYS	FLOW DIAGRAM	VLV NO.	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
SI	X-HIAW-1-44	SI-6-1	8	12 ACC DISCH CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-6-2	8	12 ACC DISCH CHECK	A	SP-1070, CL.2 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-6-3	8	11 ACC DISCH CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-6-4	8	11 ACC DISCH CHECK	A	SP-1070, CL.2 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-9-1	8	SI to LP B CL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-9-2	8	SI TO LP A CL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-9-3	8	LO HEAD SI TO RX VSL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-9-4	8	LO HEAD SI TO RX VSL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-9-5	8	LO HEAD SI TO RX VSL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-9-6	8	LO HEAD SI TO RX VSL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-16-4	8	SI TO LP B CL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-16-5	8	SI to LP A CL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-16-6	8	SI TO RX VSL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59
SI	X-HIAW-1-44	SI-16-7	8	SI TO RX VSL CHECK	A	SP-1070 SP-1001AA	LT LT	R D	#59

ASME CODE VALVES

SYS	FLOW DIAGRAM	VALVE NO	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
FD/AF	NF-39222	CV-31681	16	11 TD AFWP OIL CLR CLG WATER INLET	B	SP-1102	E	M	#9
FD/AF	NF-39222	CV-31682	16	12 MD AFWP OIL CLR CLG WATER INLET	B	SP-1100	E	M	#9
FD/AF	NF-39222	AF-29-1	16	11 AUX FW PUMP SUCTION RELIEF	C	SP-1154(6)	SP	5Y	
FD/AF	NF-39222	AF-29-2	16	12 AUX FW PUMP SUCTION RELIEF	C	SP-1154(6)	SP	5Y	
FD/AF	NF-39222	F-8-1	16	FW TO 11 STM GEN CHECK	C	—	E	-	#27
FD/AF	NF-39222	F-8-2	16	FW TO 12 STM GEN CHECK	C	—	E	-	#27
FD/AF	NF-39222	AF-16-1	16	AUX FW TO 11 STEAM GENERATOR CHECK	C	SP-1101	E	R	#5, #12
FD/AF	NF-39222	AF-16-2	16	AUX FW TO 12 STEAM GENERATOR CHECK	C	SP-1101	E	R	#5, #12
FD/AF	NF-39222	AF-15-1	16	AUX FW TO STEAM GEN 11 CHECK	C	SP-1103	E	R	#5, #12
FD/AF	NF-39222	AF-15-2	16	AUX FW TO STM GEN 12 CHECK	C	SP-1103	E	R	#5, #12
FD/AF	NF-39222	AF-15-3	16	AUX FW TO STM GEN 11 CHECK	C	SP-1101	E	R	#5, #12
FD/AF	NF-39222	AF-15-4	16	AUX FW TO STM GEN 12 CHECK	C	SP-1101	E	R	#5, #12
FD/AF	NF-39222	AF-15-9	16	11 AUX FW PUMP DISCHARGE CHECK	C	SP-1102	E	M	#5
FD/AF	NF-39222	AF-14-1	16	11 AUX FW PUMP SUCTION CHECK	C	—	—	—	#27
FD/AF	NF-39222	AF-15-10	16	12 AUX FW PMP DISCHARGE CHECK	C	SP-1100	E	M	#5
FD/AF	NF-39222	AF-14-3	16	12 AUX FW PMP SUCTION CHECK	C	—	—	—	#27
FD/AF	NF-39222	AF-12-1	16	AFW TO 11 S/G	E	Cl.2	L	S	
FD/AF	NF-39222	AF-12-2	16	AFW to 12 S/G	E	Cl.2	L	S	
FD/AF	NF-39222	AF-13-3	16	11 AFW PMP DISCH	E	Cl.2	L	S	

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ASME CODE VALVES

SYS	FLOW DIAGRAM	VALVE NO	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
CA	NF-39252	CV-31941	18	11 CNTMT SPRAY SUCT FR CSTC STANDPIPE ISOL	B	SP-1090	E	M	#18
CA	NF-39252	CV-31938	18	12 CNTMT SPRAY SUCT FR CSTC STANDPIPE ISOL	B	SP-1090	E	M	#18
CA	NF-39252	CA-11-1	18	CAUSTIC ADD TO 11 & 12 CS PUMPS CHECK	C	SP-1153	E	CS	#5
CA	NF-39252	CA-7-1	18	VACUUM BREAKER AT STANDPIPE	C	SP-1152	E	Q	#17
CA	NF-39252	CA-7-2	18	VACUUM BREAKER AT STANDPIPE	C	SP-1152	E	Q	#17
CA	NF-39252	CA-1-1	18	CV-31941 INLET ISOL	E	CI.2	L	S	
CA	NF-39252	CA-1-2	18	CV-31941 OUTLET ISOL	E	CI.2	L	S	
CA	NF-39252	CA-1-3	18	CV-31938 INLET ISOL	E	CI.2	L	S	
CA	NF-39252	CA-1-4	18	CV-31938 OUTLET ISOL	E	CI.2	L	S	

ASME CODE VALVES

SYS	FLOW DIAGRAM	VALVE NO.	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
CS	NF-39237	CS-18	19	11 CNTMT SPRAY PMP DSCH CHECK	A	SP-1072-29B	E LT	R R	#57, #5, #32
CS	NF-39237	CS-19	19	12 CNTMT SPRAY PMP DSCH CHECK	A	SP-1072-29A	E LT	R R	#57, #5, #32
CS	NF-39237	MV-32103	19	11 CNTMT SPRAY PMP DISCH	A	SP-1137 SP-1072-29B	E LT	R R	#8
CS	NF-39237	MV-32105	19	12 CNTMT SPRAY PMP DISCH	A	SP-1137 SP-1072-29A	E LT	R R	#8
CS	NF-39237	CS-11	19	11 CNTMT SPRAY PMP TO RWST RECIRC	E	Cl.1.18-1	L	S	
CS	NF-39237	CS-12	19	12 CNTMT SPRAY PUMP TO RWST RECIRC	A	SP-1072-29B	LT	R	#58
CS	NF-39237	CS-12	19	12 CNTMT SPRAY PUMP TO RWST RECIRC	E	Cl.1.18-1	L	S	
CS	NF-39237	CS-32-1	19	CA TO 11 CS PMP	A	SP-1072-29A	LT	R	#58
CS	NF-39237	CS-32-2	19	CA TO 11 CS PMP	E	Cl.2	L	S	
CS	NF-39237	CS-32-3	19	CA TO 12 CA PMP	E	Cl.2	L	S	
CS	NF-39237	CS-32-4	19	CA TO 12 CS PMP	E	Cl.2	L	S	

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59. REQUEST FOR RELIEF (con't)

ALTERNATE INSPECTION (TESTING)

1. Valves listed as serving a pressure isolation function will be leak tested at function differential pressure during the daily reactor coolant inventory test. This test is described in Attachment 1. Estimated error is approximately 0.1 gallon/minute based on propagation of instrument error. This is an "on line" leak test which measures all sources of reactor coolant leakage, including leakage past pressure isolation valves into low pressure systems. Typical leakage rates measured are from 0.1 to 0.5 gallon/minute in each unit.
2. Following each refueling outage leakage testing of the pressure isolation valves is performed. The test method is outlined below:
 - a 32164, 32230, 32165, 32231
 1. With RCS pressure at 2235 PSIG, drain valve located downstream of 32164 and 32230 is opened, leakage is measured and the drain valve reclosed.
 2. Following a.1 above (RCS at 2235 PSIG) 32164 and 32230 are opened approximately 1/4 inch & the leakage through 32165 and 32231 is determined by monitoring the RHR system for any pressure increase.
 - b. 31447, 31449, SI-9-3, SI-9-4, SI-16-4, SI-16-5, SI-16-6, SI-16-7, SI-6-1, SI-6-3, and 32066
 1. With RCS pressure at 2235, the RCS pressure boundary is extended do the second redundant pressure isolation valve. (This is accomplished using steel tubing which connects the RCS to the drain valves between the first and second pressure isolation valves)
 2. Following b.1 above flow and pressure instruments (F1-929 & P1-929) are valved in to measure total leakage through SI-9-3, SI-9-4, SI-16-4, SI-16-5, SI-16-6, and SI-16-7, 31447 and 31449.
 3. Following b.1 above ll & 12 accumulator levels are recorded. After a four hour period, the levels are again recorded. Any leakage past SI-6-1, SI-6-3, and 32066 will be reflected by a change in accumulator level (sensitivity of the level instruments are 4.46 GAL/%).
 - c. SI-9-1, SI-9-2, SI-9-5, SI-9-6

Following test condition b.1 above the RCS pressure boundary is returned to the first pressure isolation valve. Under this changed condition steel tubing is temporary installed to connect pressure and flow instruments (F1-929 and P1-929) to the low pressure side of SI-9-1, SI-9-2, SI-9-5 and SI-9-6. F1-929 and P1-929 are then used to measure leakage through the valves listed above.
 - d. SI-6-2 and SI-6-4

Seat leakage through SI-6-2 and SI-6-4 is measured prior to placing the accumulators in service.

SCHEDULE FOR IMPLEMENTATION

Six months from submittal date of Revision 4.

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62. REQUEST FOR RELIEF

COMPONENT	FUNCTION	ASME	
		Code Class	Vlv Cat
React Vsl Inj Fr RH MV-32064	Low head SI to reactor vessel.	2	A
React Vsl Inj Fr RH MV-32065	Low head SI to reactor vessel.	2	A

CODE REQUIREMENT

The valves will not be exercised as required by IWV-3520.

BASIS

These valves are normally closed. They open automatically on receipt of an SI signal.

Reactor operation with these valves open is possible, but closed they afford an additional degree of protection for low pressure RHR piping. During periodic exercising of the valves, both check valves would have to be stuck open a significant amount to threaten RHR piping with overpressurization. While this possibility is remote we will revise our valve testing program to eliminate this potential hazard by scheduling tests for cold shutdown outages when the reactor coolant system is depressurized and cooled down.

ALTERNATE INSPECTION (TESTING)

These valves will be stroked each cold shutdown.

SCHEDULE FOR IMPLEMENTATION

Six months from submittal date of Revision 2.

SECTION 2 UNIT NO. 2 COMPONENTS

This section contains a description of our proposed program of inservice inspection and testing of components in Unit No. 2 of the Prairie Island Nuclear Generating Plant. This program conforms to the requirements of 10 CFR 50, Section 50.55a(g).

The information presented in this section follows the recommendations contained in a letter dated November 24, 1976 from Mr D L Ziemann, Chief, Operating Reactors Branch #2, Division of Operating Reactors, USNRC, and in a letter dated January 16, 1978 from Mr D K Davis, Acting Chief, Operating Reactors Branch #2. The program is updated as required by changes to Section 50.55a(g) published in the Federal Register on October 7, 1979.

Inservice inspection and testing requirements are updated at 120 month intervals to conform to the latest edition and addenda of Section XI of the ASME Code referenced in paragraph (b) of 10 CFR 50, Section 50.55a. This manual will be updated each time changes are made to the inservice inspection and testing program. Deviations from Code requirements are also documented for NRC Staff review in this manual.

The program description is arranged in the following manner:

Nondestructive Examination

Class 1	- Section 2.1.1
Class 2	- Section 2.1.2
Class 3	- Section 2.1.3
Pressure Tests	- Section 2.2
Inservice Tests of Pumps	- Section 2.3
Inservice Tests of Valves	- Section 2.4
Deviations from Section XI Requirements	- Section 2.5

Proposed changes to the Technical Specifications which implement this program on Unit No. 2 were submitted to the Commission on October 12, 1977. A summary of these proposed changes is contained in Section 3 of this report.

System drawings showing ASME Code Classification boundaries are included in Section 4 of this report. These drawings define the pressure test boundaries and the Class 3 components subject to visual inspection as part of the nondestructive examination program.

ASME Section XI Nondestructive Examination Program (Class 1) - Unit No. 2

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: April 21, 1978 through December 21, 1984

NOTES:

1. The following tables identify the specific Class 1 components and parts to be examined. These tables can be directly correlated with Table IWB-2500 and Table IV3-2600 of Section XI and identify the examination method for each listed item. The inspections that were performed during the first forty (40) months of operation are included. The tables show the amount of items required to be examined for each period and the corresponding percentage that will have been completed by the end of that period.
2. Repairs will be performed in accordance with the applicable requirements of the latest edition and addenda of the ASME Code, Section XI. However, if rules for a particular repair are not specified in Section XI, the original design specification and Construction Code of the component or system, or later editions of the Construction Code or ASME Code Section III, either in their entirety or portions thereof, may be used.

LEGEND:

Examination method:

- V - visual
- U.T. - ultrasonic
- R.T. - radiography
- S - surface examination, either liquid penetrant or magnetic particle

Inspection Period

- ONE - December 21, 1974 to April 21, 1978
- TWO - April 21, 1978 to August 21, 1981
- THREE - August 21, 1981 to December 21, 1984

ASME Section XI Nondestructive Examination Program (Class 2) - Unit No. 2

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: April 21, 1978 through December 21, 1984

NOTES:

1. The following tables identify the specific Class 2 components and parts to be examined. These tables can be directly correlated with Table IWC-2520 and Table IWC-2600 of Section XI and identify the examination method for each listed item. The tables identify the number of items required to be examined over a forty (40) year service lifetime, and the amount required for a ten (10) year inspection interval. The inspections that were performed during the first forty (40) months of operation are included, along with the corresponding percentage that was completed. The tables also show the amount of items required to be examined during each period, and the percentage that will have been completed by the end of that period.
2. The scope of the inspection program for Class 2 components was based on the exemption criteria of IWC-1220.
3. In accordance with the requirements of IWC-2411 the nondestructive examinations were selected so that the total examinations completed over forty (40) years will be 100% of the required examinations of the system or portions of the systems with a single stream or be equivalent to having performed 100% of the required examinations in one of the streams of a multiple stream system. The selection of pressure retaining bolting for valves was based on the type, manufacturer, and design of valve and not on the total number of certain size valve bonnet bolts per system.
4. Repairs will be performed in accordance with the applicable requirements of the latest edition and addenda of the ASME Code, Section XI. However, if rules for a particular repair are not specified in Section XI, the original design specification and Construction Code of the component or system, or later editions of the Construction Code or ASME Code Section III, either in their entirety or portions thereof, may be used.

LEGEND:

Examination method:

- V - visual
- U.T. - ultrasonic
- R.T. - radiography
- S - surface examination, either liquid penetrant or magnetic particle

Inspection Period:

- ONE - December 21, 1974 to April 21, 1978
- TWO - April 21, 1978 to August 21, 1981
- THREE - August 21, 1981 to December 21, 1984

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ASME Section XI Nondestructive Examination Program (Class 3) - Unit No. 2

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: April 21, 1978 through December 21, 1984

NOTES:

1. The classification diagrams identify the systems that are required to be examined in accordance with IWD-2000. Refer to Section 4 of this report.
2. The scope of the inspection program for Class 3 components is based on the classification of the plant's inspection boundaries and exemptions as allowed for in IWD-2600 and IWD-5200. The inspection program is in accordance with IWD-2400 (Inspection Schedule).
3. Visual examination will be conducted for evidence of component leakage, structural distress, or corrosion when the system is undergoing either a system inservice test, component functional test, or a system pressure test.
4. Supports and hangers for components will be visually examined to detect any loss of support capability or evidence of inadequate restraint.
5. Repairs will be performed in accordance with the applicable requirements of the latest edition and addenda of the ASME Code, Section XI. However, if rules for a particular repair are not specified in Section XI, the original design specification and Construction Code of the component or system, or later editions of the Construction Code or ASME Code Section III, either in their entirety or portions thereof, may be used.

LEGEND:

Inspection Period

- | | | |
|-------|---|--------------------------------------|
| ONE | - | December 21, 1974 to April 21, 1978 |
| TWO | - | April 21, 1978 to August 21, 1981 |
| THREE | - | August 21, 1981 to December 21, 1984 |

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ASME Section XI Pressure Testing Program - Unit No. 2

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda
 Program Period: April 21, 1978 through December 21, 1984

The system Code Class boundaries are established on the attached ASME Code Classification Drawings, Sheets 2 through 40. The Pressure Test Program for the Class 1, 2 and 3 systems is as follows:

ASME CODE CLASS	TEST TYPE	TEST FREQUENCY	TEST SPECIFICATION	REQUEST FOR RELIEF
1	Leakage	refueling	IWB-5210(a) IWB-5221 IWA-5000	#20, #60
	Hydrostatic	10 years	IWB-5210(b) IWB-5222 IWA-5000	#20
2	Pressure	10 years	IWC-2412 IWC-2510	#19, #20, #29
3	Pressure	10 years	IWD-2410(b)	#20, #28

ASME Section XI Pump Testing Program - Unit No. 2

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: December 21, 1979 through December 21, 1984

The attached sheet identifies the Unit 2 system pumps that are subject to the testing requirements of Section XI, Subsection IWP.

LEGEND:

Test Frequency

M = monthly

2M - every other month

Test Parameter

Pi = inlet pressure

Vv = vibration velocity

Q = flowrate

Pd = discharge pressure

N = speed

Tb = bearing temperature

L = level

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ASME Section XI Valve Testing Program - Unit No. 2

ASME Code Edition and Addenda: 1974 Edition through and including Summer 1975 Addenda

Program Period: December 21, 1979 through December 21, 1984

NOTES:

1. The following sheets identify the Unit 2 system valves that are subject to the testing requirement of Section XI, Subsection IWV. Valves in Code Class 1, 2 and 3 systems have been categorized in accordance with IWV-2110, subject to the exclusions of IWV-1300, using the following criteria:
 - a) The program has been limited to those Code Class 1, 2 and 3 valves that must function to prevent the occurrence of or mitigate the consequences of an analyzed accident contained in the FSAR.
 - b) Containment isolation valves are considered category A valves and are leak tested in accordance with the Plant Technical Specification. Category A valves are exercised in accordance with IWV 3410, except where relief is requested. Containment isolation valves which are appendages of the containment vessel and are not connected to any other code class 1, 2 or 3 piping systems are not shown on code class drawings.
2. There are no partial stroke exercise tests in the program.

LEGEND

Test Type:

E = exercise
SP = relief valve setpoint verification
L = valve lineup check
LT = leak test

Test Frequency:

D = daily	CS = cold shutdown	CU = core unload
M = monthly	5y = 5 years	
Q = quarterly	S = startup	
R = refueling	2W = every other week	
CS = cold shutdown	2M = every other month	

NOTE: Inservice valve testing at cold shutdown is defined as: Valve testing should commence not later than 48 hours after shutdown and continue until complete or plant is ready to return to power. Completion of all valve testing is not a prerequisite to return to power. Any testing not completed at one cold shutdown should be performed during the subsequent cold shutdowns to meet the code specified testing frequency.

ASME CODE VALVES

SYSTEM	FLOW DIAGRAM	VALVE NO.	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
SI	X-Hiaw1001-6	MV-32172	33	2 SAF INJ REAC VSL INJ ISOL A	B	SP-2137	E	R	#8
SI	X-Hiaw1001-6	MV-32170	33	2 SAF INJ REAC VSL INJ ISOL B	B	SP-2137	E	R	#8
SI	X-Hiaw1001-6	MV-32167	33	2 REAC VSL INJ FR RH EXCH ISOL	B	SP-2167	E	CS	#62
SI	X-Hiaw1001-6	MV-32180	33	CNTMT SMP B ISOL B-1	B	SP-2137	E	R	#8
SI	X-Hiaw1001-6	MV-32181	33	CNTMT SMP B ISOL B-2	B	SP-2137	E	R	#8
SI	X-Hiaw1001-6	2SI-25-1	33	21 ACCUMULATOR RELIEF	C	SP-2154(3)	SP	5Y	
SI	X-Hiaw1001-6	2SI-25-2	33	22 ACCUMULATOR RELIEF	C	SP-2154(3)	SP	5Y	
SI	X-Hiaw1001-6	2SI-26-1	33	RH EXCHANGER TO REACTOR VESSEL RELIEF	C	SP-2154(3)	SP	5Y	
SI	X-Hiaw1001-6	2SI-6-3	33	21 ACCUMULATOR OUTLET CHECK VALVE	C	SP-2092A	E	R	#5, #7
SI	X-Hiaw1001-6	2SI-6-4	33	21 ACCUMULATOR OUTLET CHECK VALVE	C	SP-2092A	E	E	#5, #7
SI	X-Hiaw1001-6	2SI-16-6	33	LOOP A COLD LEG INJECTION CHECK VALVE	C	SP-2092A	E	R	#7
SI	X-Hiaw1001-6	2SI-9-2	33	LOOP A COLD LEG INJECTION CHECK VALVE	C	SP-2092A	E	R	#5, #7
SI	X-Hiaw1001-6	2SI-16-7	33	RX VESSEL INJECTION LINE CHECK VALVE	C	SP-2092A	E	R	#7
SI	X-Hiaw1001-6	2SI-6-1	33	22 ACCUMULATOR OUTLET CHECK VALVE	C	SP-2092A	E	R	#5, #7
SI	X-Hiaw1001-6	2SI-6-2	33	22 ACCUMULATOR OUTLET CHECK VALVE	C	SP-2092A	E	R	#5, #7
SI	X-Hiaw1001-6	2SI-16-4	33	LOOP B COLD LEG INJECTION CHECK VALVE	C	SP-2092A	E	R	#7

ASME CODE VALVES

SYS	FLOW DIAGRAM	VALVE NO.	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
SI	X-HIAW-1001-6	MV-32177	33	2 SAF INS REAC VSL INJ ISOL	A	SP-2137	E	R	#8
						SP-2072-28A	LT	R	
SI	X-HIAW-1001-6	MV-32176	33	2 REAC SAF INJ COLD LEG ISOL	A	Cl.1.18-2	L	S	
						SP-2072-28B	E,LT	R	#57
SI	X-HIAW-1001-6	MV-32178	33	21 CONTAINMENT SUMP B ISOL A-1	A	SP-2137	E	R	#8, #16
						SP-2072-30A	LT	R	
SI	X-HIAW-1001-6	MV-32179	33	21 CONTAINMENT SUMP B ISOL A-2	A	SP-2137	E	R	#8, #16
						SP-2072-30A	LT	R	
SI	X-HIAW-1001-6	CV-31554	N/A	N ₂ SUPPLY TO ACC CONTAINMENT ISOL	A	SP-2072-31	E	R	#57
							LT	R	
SI	X-HIAW-1001-6	CV-31244	N/A	N ₂ SUPPLY TO ACC HCV	A	SP-2072-31	E	R	#57
							LT	R	
SI	X-HIAW-1001-6	CV-31511	33	N ₂ SUPPLY TO 21 ACC ISOL	A	SP-2072-31	E	R	#57
							LT	R	
SI	X-HIAW-1001-6	CV-31512	33	N ₂ SUPPLY TO 22 ACC ISOL	A	SP-2072-31	E	R	#57
							LT	R	
SI	X-HIAW-1001-6	MV-32168	33	2 REAC VSL INJ FR RH EXH ISOL	A	SP-2167	E	CS	#62
						SP-2072-48	LT	R	

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ASME CODE VALVES

SYS	FLOW DIAGRAM	VALVE NO.	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
SI	X-HIAW-1001-6	2SI-6-1	33	22 ACC DISCH CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-6-2	33	22 ACC DISCH CHECK	A	SP-2070, Cl. 2 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-6-3	33	21 ACC DISCH CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-6-4	33	21 ACC DISCH CHECK	A	SP-2070, Cl. 2 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-9-1	33	SI TO LP B CL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SL-9-2	33	SI TO LP A CL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-9-3	33	LO HEAD SI TO RX VSL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-9-4	33	LO HEAD SI TO RX VSL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-9-5	33	LO HEAD SI TO RX VSL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-9-6	33	LO HEAD SI TO RX VSL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-16-4	33	SI TO LP B CL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-16-5	33	SI TO LP A CL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-16-6	33	SI TO RX VSL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59
SI	X-HIAW-1001-6	2SI-16-7	33	SI TO RX VSL CHECK	A	SP-2070 SP-2001-AA	LT LT	R D	#59

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ASME CODE VALVES

SYSTEM	FLOW DIAGRAM	VALVE NO.	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
FD-AF	NF-39223	CV-31684	38	22 RD AFWP OIL CLR CLG WATER INLET	B	SP-2102	E	M	#9
FD/AF	NF-39223	CV-31683	38	21 MD AFWP OIL CLR CLG WATER INLET	B	SP-2100	E	M	#9
FD/AF	NF-39223	2AF-29-1	38	21 AUX FW PMP SUCT RELIEF	C	SP-2154(6)	SP	5Y	
FD/AF	NF-39223	2AF-29-2	38	22 AUX FW PMP SUCT RELIEF	C	SP-2154(6)	SP	5Y	
FD/AF	NF-39223	2FW-8-1	38	FW TO 21 STM GEN CHECK	C	_____	-	-	#27
FD/AF	NF-39223	2FW-8-2	28	FW TO 22 STM GEN CHECK	C	_____	-	-	#27
FD/AF	NF-39223	AF-16-4	38	AUX FW TO 21 STEAM GENERATOR CHECK	C	SP-2101	E	R	#5, #12
FD/AF	NF-39223	AF-16-3	38	AUX FW TO 22 STEAM GENERATOR CHECK	C	SP-2101	E	R	#5, #12
FD/AF	NF-39223	AF-15-7	38	AUX FW TO STM GEN 21 CHECK	C	SP-2103	E	R	#5, #12
FD/AF	NF-39223	AF-15-6	38	AUX FW TO STM GEN 22 CHECK	C	SP-2103	E	R	#5, #12
FD/AF	NF-39223	AF-15-8	38	AUX FW TO STM GEN 21 CHECK	C	SP-2101	E	R	#5, #12
FD/AF	NF-39223	AF-15-5	38	AUX FW TO STM GEN 22 CHECK	C	SP-2101	E	R	#5, #12
FD/AF	NF-39223	AF-15-12	38	22 AUX FW PMP DSCH CHECK	C	SP-2102	E	M	#5
FD/AF	NF-39223	AF-14-7	38	22 AUX FW PMP SUCT CHECK	C	_____	-	-	#27
FD/AF	NF-39223	AF-15-11	38	21 AUX FW PMP DSCH CHECK	C	SP-2100	E	M	#5
FD/AF	NF-39223	AF-14-5	38	21 AUX FW PMP SUCT CHECK	C	_____	-	-	#27
FD/AF	NF-39223	AF-12-3	38	AFW TO 22 S/G	E	C1.2	L	S	
FD/AF	NF-39223	AF-12-4	38	AFW TO 21 S/G	E	C1.2	L	S	
FD/AF	NF-39223	AF-13-5	38	21 AFW PMP DSCH	E	C1.2	L	S	

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ASME CODE VALVES

SYSTEM	FLOW DIAGRAM	VALVE NO.	CLASS DWG	DESCRIPTION	VLV CAT	TEST PROC	TEST TYPE	TEST FREQ	REQUEST FOR RELIEF
CA	NF-39252	CV-31939	18	21 CNTMT SPRAY SUCT FR CSTC STANDPIPE ISOL	B	SP-2090	E	M	#18
CA	NF-39252	CV-31940	18	22 CNTMT SPRAY SUCT FR CSTC STANDPIPE ISOL	B	SP-2090	E	M	#18
CA	NF-39252	2CA-11-1	18	CAUSTIC ADD TO 21 & 22 CS PUMPS CHECK	C	SP-2153	E	Q	#5
CA	NF-39252	2CA-7-1	18	VACUUM BREAKER AT STANDPIPE	C	SP-2152	E	CS	#17
CA	NF-39252	2CA-7-2	18	VACUUM BREAKER AT STANDPIPE	C	SP-2152	E	A	#17
CA	NF-39252	2CA-1-1	18	CV-31939 INLT ISOL	E	C1.2	L	CS	
CA	NF-39252	2CA-1-2	18	CV-31939 OUTLET ISOL	E	C1.2	L	CS	
CA	NF-39252	2CA-1-3	18	CV-31940 INLET ISOL	E	C1.2	L	CS	
CA	NF-39252	2CA-1-4	18	CV-31940 OUTLET ISOL	E	C1.2	L	CS	

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59. REQUEST FOR RELIEF (con't)

BASIS

The alternate inspection (Testing) method gives better assurance of the ability of the components to perform their intended function.

ALTERNATE INSPECTION (TESTING)

1. Valves listed as serving a pressure isolation function will be leak tested at function differential pressure during the daily reactor coolant inventory test. This test is described in Attachment 1. Estimated error is approximately 0.1 gallon/minute based on propagation of instrument error. This is an "on line" leak test which measures all sources of reactor coolant leakage, including leakage past pressure isolation valves into low pressure systems. Typical leakage rates measured are from 0.1 to 0.5 gallon/minute in each unit.
2. Following each refueling outage leakage testing of the pressure isolation valves is performed. The test method is outlined below:
 - a. 32192, 32232, 32193, 32233
 1. With RCS pressure at 2235 PSIG, **drain valve** located downstream of 32192 and 32232 is opened, **leakage** is measured and the drain valve reclosed.
 2. Following a.1 above (RCS at 2235 PSIG) 32192 and 32232 are opened approximately 1/4 inch & the leakage through 32193 and 32233 is determined by monitoring the RHR system for any pressure increase.
 - b. 31459, 31461, 2SI-9-3, 2SI-9-4, 2SI-16-4, 2SI-16-5, 2SI-16-6, 2SI-16-7, 2SI-6-1, 2SI-6-3, & 32169
 1. With RCS pressure at 2235, **the** RCS pressure boundary is extended to the second redundant pressure isolation valve. (This is accomplished using steel tubing which connects the RCS to the drain valves between the first and second pressure isolation valves)
 2. Following b.1 above flow and pressure instruments (FI-929 & PI-929) are valved in to measure total leakage through 2SI-9-3, 2SI-9-4, 2SI-16-4, 2SI-16-5, 2SI-16-6 & 2SI-16-7, 31459 & 31461.
 3. Following b.1 above 11 & 12 accumulator levels are recorded. After a four hour period, the levels are again recorded. Any leakage past 2SI-6-1, 2SI-6-3, & 32169 will be reflected by a change in accumulator level (sensitivity of the level instruments are 4.46 GAL/%).
 - c. 2SI-9-1, 2SI-9-2, 2SI-9-5, 2SI-9-6
 - Following test condition b.1 above the RCS pressure boundary is returned to the first pressure isolation valve. Under this changed condition steel tubing is temporary installed to connect pressure and flow instruments (FI-929 and PI-929) to the low pressure side of 2SI-9-1, 2SI-9-2, 2SI-9-5, and 2SI-9-6. PI-929 are then used to measure leakage through the valves listed above.
 - d. 2SI-6-2 and 2SI-6-4
 - Seat leakage through 2SI-6-2 and 2SI-6-4 is measured prior to placing the accumulators in service.

SCHEDULE FOR IMPLEMENTATION

Six months from submittal date of **Revision 4**.

62. REQUEST FOR RELIEF

COMPONENT	FUNCTION	ASME	
		Code Class	Vlv Cat
React Vsl Inj Fr RH MV-32167	Low head SI to reactor vessel.	2	A
React Vsl Inj Fr RH MV-32168	Low head SI to reactor vessel.	2	A

CODE REQUIREMENT

The valves will not be exercised as required by IWV-3520.

BASIS

These valves are normally closed. They open automatically on receipt of an SI signal.

Reactor operation with these valves open is possible, but closed they afford an additional degree of protection for low pressure RHR piping. During periodic exercising of these valves, both check valves would have to be stuck open a significant amount to threaten RHR piping with overpressurization. While this possibility is remote we will revise our valve testing program to eliminate this potential hazard by scheduling tests for cold shutdown outages when the reactor coolant system is depressurized and cooled down.

ALTERNATE INSPECTION (TESTING)

These valves will be stroked each cold shutdown.

SCHEDULE FOR IMPLEMENTATION

Six months from submittal date of Revision 2.

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