

NORTHERN STATES POWER COMPANY

DOCKET NUMBERS 50-282 AND 50-306

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

UNIT 1 AND 2

INSERVICE TESTING PROGRAM MANUAL

This manual contains a description of our program of inservice testing of Unit 1 and common components and Unit 2 components at Prairie Island Nuclear Generating Plant. This program conforms to the requirements of 10 CFR 50, Section 50.55a as published in the Federal Register on December 31, 1992.

The manual has been revised for the third 10 year interval. It has been prepared, reviewed and approved as indicated below.

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OC Meeting		Date	<u>7/29/93</u>

PI IST  
3rd 10 Year Program  
Rev. 2 8/20/93

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RECORD OF IST PROGRAM REVISIONS

DATE

REMARKS

6/16/93

3RD 10 Year IST Program Submittal

7/21/93

Added testing of Residual Heat  
Removal Pumps on a cold shutdown  
frequency.

Added testing of CV-31381, 31411,  
31383, & 31384 to IST PROGRAM.

Added testing of CL-76-3 and  
CL-76-4 to IST PROGRAM.

## 1.2 ASME SECTION XI PUMP TESTING PROGRAM - UNIT NO. 1 AND COMMON COMPONENTS

ASME Code Edition and Addenda: 1989 Edition

Program Period: December 16, 1993 to December 16, 2003

The attached sheet identifies the Unit 1 and common system pumps that are subject to the testing requirements of Section XI, ASME/ANSI OMA-1988 part 6.

### LEGEND

#### Test Frequency

- M = monthly
- Q = quarterly
- C = cold shutdown
- Y = 12 months
- R = Refueling

#### Test Parameter

- Pi = inlet pressure
- Vv = vibration velocity
- Q = flowrate
- Pd = discharge pressure
- N = speed

PI IST 1.2-1  
3rd 10 Year Program  
Rev. 2 8/20/93

## ASME CODE PUMPS- Unit 1

PUMP DESCRIPTION	FLOW DIAGRAM	CLASS DWG	TEST PROC	TEST PARAMETER					TEST FREQ	REQUEST FOR RELIEF
				Pi	Vv	Q	Pd	N		
11 Safety Injection	X-H-1-45	9	SP-1088	X	X		X		Q	#1
			SP-1092A	X	X	X	X		R	
12 Safety Injection	X-H-1-45	9	SP-1088	X	X		X		Q	#1
			SP-1092A	X	X	X	X		R	
12 Diesel Cooling Water	NF-39216	14	SP-1106A	X	X	X	X	X	Q	#1, #2, #4, #5
22 Diesel Cooling Water	NF-39216	14	SP-1106B	X	X	X	X	X	Q	#1, #2, #4, #5
121 MD Cooling Water	NF-39216	14	SP-1106C	X	X	X	X		Q	#4, #5
11 Turbine Aux Feedwater	NF-39222	16	SP-1102	X	X		X	X	Q*	
			SP-1103	X	X	X	X	X	R	
12 Motor Aux Feedwater	NF-39222	16	SP-1100	X	X		X		Q*	
			SP-1101	X	X	X	X		R	
11 Containment Spray	NF-39237	19	SP-1090	X	X		X		Q	#1, #10
12 Containment Spray	NF-39237	19	SP-1090	X	X		X		Q	#1, #10
11 Component Cooling	NF-39245	23	SP-1155	X	X	X	X		Q	#1, #2
12 Component Cooling	NF-39245	23	SP-1155	X	X	X	X		Q	#1, #2
121 Cntrl Rm Chill Water	NF-39603-3	28	SP-1161	X	X	X	X		Q	
122 Cntrl Rm Chill Water	NF-39603-3	28	SP-1161	X	X	X	X		Q	
11 Residual Heat Removal	X-H-1-31	3	SP-1089	X	X	X	X		Q	#4
12 Residual Heat Removal	X-H-1-31	3	SP-1089	X	X	X	X		Q	#4

\* Technical Specification requires the Auxiliary Feedwater Pump be started at intervals of one month.

### 1.3 ASME SECTION XI VALVE TESTING PROGRAM - UNIT NO. 1 AND COMMON COMPONENTS

ASME Code Edition and Addenda: 1989 Edition

Program Period: December 16, 1993 to December 16, 2003

#### NOTES:

1. The following sheets identify the Unit 1 and common system valves that are subject to the testing requirements of Section XI, Subsection IWB. Valves in Code Class 1, 2, and 3 systems have been categorized in accordance with ASME/ANSI OMa-10, 1988, 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 USAR and to take the reactor to safe shutdown.
  - 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 OM-10 except where relief is requested.

#### 2. LEGEND

##### TEST TYPE:

E = exercise  
SP = relief valve  
LT = leak test  
I = inspection  
PV = position verification  
2 y = every other year

##### TEST FREQUENCY:

D = daily  
M = monthly  
Q = quarterly  
R = refueling  
Y = yearly  
AR = as required (See note 4)

CS = Cold shutdown  
S = startup  
CU = core unload  
5y = 5 year  
10y = 10 years

### 1.3 ASME SECTION XI VALVE TESTING PROGRAM - UNIT NO. 1 AND COMMON COMPONENTS (CONT'D)

3. Inservice valve testing at cold shutdown is defined as: Testing is required if not done in the previous 90 days. 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.
4. Containment Inservice Purge Supply and Exhaust Valves are normally blind flange out-of service during operation. In event that valves are required for containment integrity they will be exercised and leak rate tested prior to being placed inservice.
5. For all control and motor valve exercise (stroke timing) tests, the base stroke time from which the Code allowable time increase and decrease is figured will be a time established by one of the following methods:
  - a) Original preoperational testing.
  - b) Post maintenance testing.
  - c) The first running of the test.
6. The column titled "Valve Function" describes the valve function as defined by the ASME Code (active or passive). In addition, for active valves the valve position required for accident mitigation is included. For example, an active valve that is required to open for accident mitigation is listed as "act-open". For an active valve that is required to open and close for accident mitigation is "act-both".

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
AF-13-1	AF	12 & 21 AUX FW PUMPS DISCHARGE X-CONN	NF-39222	16	B	ACT-BOTH	SP-1730	E	CS	
AF-14-1	AF	11 AUX FW PUMP SUCT CHK	NF-39222	16	C	ACT-OPEN		E	CS	
AF-14-3	AF	12 AUX FW PUMP SUCT CHK	NF-39222	16	C	ACT-OPEN		E	CS	
AF-15-1	AF	AUX FW TO STM GEN 11 CHK	NF-39222	16	C	ACT-BOTH		E	CS	
AF-15-2	AF	AUX FW TO STM GEN 12 CHK	NF-39222	16	C	ACT-BOTH		E	CS	
AF-15-3	AF	AUX FW TO STM GEN 11CHK	NF-39222	16	C	ACT-BOTH		E	CS	
AF-15-4	AF	AUX FW TO STM GEN 12 CHK	NF-39222	16	C	ACT-BOTH		E	CS	
AF-15-9	AF	11 AUX FW PUMP DISCH CHK	NF-39222	16	C	ACT-BOTH		E	CS	
AF-15-10	AF	12 AUX FW PUMP DISCH CHK	NF-39222	16	C	ACT-BOTH		E	CS	
AF-16-1	AF	AUX FW AT STM GEN 11CHK	NF-39222	16	C	ACT-BOTH		E	CS	
AF-16-2	AF	AUX FW AT STM GEN 12 CHK	NF-39222	16	C	ACT-BOTH		E	CS	
AF-28-1	AF	11 AUX FW PUMP RECIRC LINE CHECK	NF-39222	16	C	ACT-OPEN		E	Q	
AF-28-2	AF	12 AUX FW PUMP RECIRC LINE CHECK	NF-39222	16	C	ACT-OPEN		E	Q	
AF-29-1	AF	11 AUX FD PUMP SUCT RELIEF	NF-39222	16	C	ACT-BOTH	P312L 1-11A	SP	10Y	
AF-29-2	AF	12 AUX FD PUMP SUCT RELIEF	NF-39222	16	C	ACT-BOTH	P3120-1-12A	SP	10Y	
CV31153	AF	11 TD AFWP RECIRC/LUBE OIL CLG CV	NF-39222	16	B	ACT-OPEN	SP-1102	E	Q	
CV31154	AF	12 MD AFWP RECIRC/LUBE OIL CLG CV	NF-39222	16	B	ACT-OPEN	SP-1100	E	Q	
MV32238	AF	AUX FDWTR TO STM GEN #11	NF-39222	16	B	ACT-BOTH	SP-1102	E	Q	
MV32239	AF	AUX FDWTR TO STM GEN #12	NF-39222	16	B	ACT-BOTH	SP-1102	E	Q	
MV32242	AF	AUX FDWTR TO STM GEN #11	NF-39222	16	B	PAS-OPEN		PV	2Y	
MV32243	AF	AUX FDWTR TO STM GEN #12	NF-39222	16	B	PAS-OPEN		PV	2Y	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
MV32333	AF	11 AUX FDWTR PUMP SUCT	NF-39222	16	B	ACT-BOTH	SP-1100	E	Q	
MV32335	AF	12 AUX FDWTR PUMP SUCT	NF-39222	16	B	ACT-BOTH	SP-1102	E	Q	
MV32381	AF	AUX FW TO STM GEN #11	NF-39222	16	B	ACT-BOTH	SP-1100	E	Q	
MV32382	AF	AUX FW TO STM GEN #12	NF-39222	16	B	ACT-BOTH	SP-1100	E	Q	
CA-11-1	CA	CAUSTIC ADDITION TO 11 & 12 CS PUMPS	NF-39252	18	C	ACT-BOTH		E	R	
CV31938	CA	12 CS SUCT PUMP FROM NaOH STDPIPE ISOL	NF-39252	18	B	ACT-OPEN	SP-1090	E	Q	
CV31941	CA	11 CS PUMP SUCT FROM NaOH STDPIPE ISOL	NF-39252	18	B	ACT-OPEN	SP-1090	E	Q	
CC-14-5	CC	11 RCP BRG CLG WTR RETURN CHK	NF-39245-1	23	C	ACT-BOTH		E	CS	
CC-14-6	CC	12 RCP BRG CLG WTR RETURN CHK	NF-39245-1	23	C	ACT-BOTH		E	CS	
CC-18-1	CC	12 RCP BRG WTR SUPPLY CHK	NF-39245-1	23	C	ACT-BOTH		E	CS	
CC-18-2	CC	11 RCP BRG WTR SUPPLY CHK	NF-39245-1	23	C	ACT-BOTH		E	CS	
CC-23-1	CC	11 EXCESS LETDOWN HT EXCH INLET CHK	NF-39245-1	23	C	ACT-CLOSE		E	CS	
CC-24-1	CC	EXCESS LTDN OUTLT CHK	NF-39245-1	23	C	ACT-CLOSE		E	CS	
CC-29-1	CC	12 RCP BRG WTR SUPPLY CHK	NF-39245-1	23	C	ACT-OPEN		E	Q	
CC-29-2	CC	11 RCP BRG WTR SUPPLY CHK	NF-39245-1	23	C	ACT-OPEN		E	Q	
CC-3-1	CC	11 COMPONENT COOLING PUMP DISCH CHK	NF-39245-1	23	C	ACT-OPEN	SP-1155	E	Q	
CC-3-2	CC	12 COMPONENT COOLING PUMP DISCH CHK	NF-39245-1	23	C	ACT-OPEN	SP-1155	E	Q	
CC-3-3	CC	RETURN LINE TO 11 COMP COOLING PUMP CHK	NF-39245-1	23	C	ACT-BOTH		E	CS	
CC-3-4	CC	RETURN LINE TO 12 COMP COOLING PUMP CHK	NF-39245-1	23	C	ACT-BOTH		E	CS	
CC-5-1	CC	RETURN LINE TO 11 COMP COOLING PUMP CHK	NF-39245	23	C	ACT-BOTH		E	CS	
CC-5-2	CC	RETURN LINE TO 12 COMP COOLING PUMP CHK	NF-39245	23	C	ACT-BOTH		E	CS	



ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CC-61-1	CC	EMERG SUPPLY TO 11/12 RCP BRG CLG CHK	NF-39245	23	C	ACT-BOTH		E	CS	
CC-61-2	CC	EMERG SUPPLY TO 11/12 RCP BRG CLG CHK	NF-39245	23	C	ACT-BOTH		E	CS	
CV31252	CC	11 EXCS ' TDWN HT EXCH OUTLET	NF-39245	23	B	ACT-CLOSE		E	Q	
MV32089	CC	11 REACT CLNT PUMP - BRG CLG WTR SUPPLY	NF-39245	23	B	PAS-OPEN		PV	2Y	
MV32090	CC	11 REACT CLNT PUMP - BRG CLG WTR RETURN	NF-39245	23	B	PAS-OPEN		PV	2Y	
MV32091	CC	12 REACT CLNT PUMP - BRG CLG WTR SUPPLY	NF-39245	23	B	PAS-OPEN		PV	2Y	
MV32092	CC	12 REACT CLNT PUMP - BRG CLG WTR RETURN	NF-39245	23	B	PAS-OPEN		PV	2Y	
MV32093	CC	11 RSDL HT EXGR COMP CLNT INLT MV	NF-39245	23	B	ACT-BOTH	SP-1155	E	Q	
MV32094	CC	12 RSDL HT EXGR COMP CLNT INLT MV	NF-39245	23	B	ACT-BOTH	SP-1155	E	Q	
MV32095	CC	11 EXCESS LET-DOWN HT EXCH SUPPLY	NF-39245	23	B	ACT-CLOSE		E	Q	
MV32115	CC	121 & 122 SPENT FUEL PIT HT EXCHANGERS	NF-39245	23	B	ACT-CLOSE	SP-1155	E	Q	
MV32117	CC	121 & 122 SPENT FUEL PIT HT EXCHANGERS	NF-39245	23	B	ACT-CLOSE	SP-1155	E	Q	
MV32120	CC	COMP CLG WTR SUPPLY HEADER	NF-39245	23	B	ACT-CLOSE	SP-1163	E	R	
MV32121	CC	COMP CLG WTR SUPPLY HEADER	NF-39245	23	B	ACT-CLOSE	SP-1163	E	R	
MV32200	CC	11 COMP CLG PMP SUCT MV	NF-39245	23	B	ACT-BOTH	SP-1155	E	Q	
MV32201	CC	12 COMP CLG PMP SUCT MV	NF-39245	23	B	ACT-BOTH	SP-1155	E	Q	
MV32266	CC	11/12 RCP COMP CLG INLT ISOL MV A	NF-39245	23	B	ACT-BOTH	SP-1163	E	R	
MV32267	CC	11/12 RCP COMP CLG INLT ISOL MV B	NF-39245	23	B	ACT-BOTH	SP-1163	E	R	
CL-43-1	CL	11 COOLING WATER PUMP DISCHARGE	NF-39216	14	C	ACT-CLOSE	SP-1106A	E	Q	
CL-43-2	CL	12 COOLING WATER PUMP DISCHARGE	NF-39216	14	C	ACT-BOTH	SP-1106A	E	Q	
CL-43-3	CL	121 COOLING WATER PUMP DISCHARGE	NF-39217	14	C	ACT-BOTH	SP-1240	E	Q	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CL-76-3	CL	CV-31769 BYPASS	NF-39603-3	28	B	ACT-OPEN	SP-1161	E	Q	
CL-76-4	CL	CV-31785 BYPASS	NF-39603-3	28	B	ACT-OPEN	SP-1161	E	Q	
CW-12-1	CL	11 CNTMT FCU CLG WTR INLET CHECK	NF-39216-4	14	C	ACT-OPEN		E	Q	
CW-12-2	CL	13 CNTMT FCU CLG WTR INLET CHECK	NF-39216-4	14	C	ACT-OPEN		E	Q	
CW-12-3	CL	12 CNTMT FCU CLG WTR INLET CHECK	NF-39216-4	14	C	ACT-OPEN		E	Q	
CW-12-4	CL	14 CNTMT FCU CLG WTR INLET CHECK	NF-39216-4	14	C	ACT-OPEN		E	Q	
CV31381	CL	11 CC HEAT EXCH CL OUT TCV	NF-39216	14	B	ACT-OPEN		E	CS	
CV31411	CL	12 CC HEAT EXCH CL OUT TCV	NF-39216	14	B	ACT-OPEN		E	CS	
CV31423	CL	12 DD CLP JACKET CLT OUT	NF-39216	14	B	ACT-OPEN	SP-1106A	E	Q	
CV39201	CL	11/13FCU CLG WATER RTN ORIFICE B-P VLV	NF-39216	14	B	ACT-OPEN	SP-1158	E	Q	
CV39203	CL	12/14FCU CLG WATER RTN ORIFICE B-P VLV	NF-39216	14	B	ACT-OPEN	SP-1158	E	Q	
MV32025	CL	11 TD AFW PUMP SUCT CLG WTR SUPPLY MV	NF-39216	14	B	ACT-OPEN	SP-1193	E	CS	
MV32027	CL	12 MD AFW PUMP SUCT CLG WTR SUPPLY MV	NF-39216	14	B	ACT-OPEN	SP-1193	E	CS	
MV32031	CL	1 TURB BLDG CLG WTR HDR MV	NF-39216	14	B	ACT-CLOSE	SP-1100	E	Q	
MV32036	CL	COOLING WTR PUMPS-CROSS-OVER	NF-39216	14	B	ACT-CLOSE	SP-1158	E	Q	
MV32037	CL	COOLING WTR PUMPS-CROSS-OVER	NF-39216	14	B	ACT-CLOSE	SP-1158	E	Q	
MV32038	CL	20 IN EMERGENCY DUMP TO GRADE	NF-39216	14	B	ACT-OPEN	SP-1158	E	Q	
MV32132	CL	11 CONTAINMENT FAN COIL OUTLET	NF-39216-4	14	B	ACT-BOTH	SP-1158	E	Q	
MV32133	CL	11 CONTAINMENT FAN COIL OUTLET	NF-39216-3	14	B	ACT-BOTH	SP-1158	E	Q	
MV32135	CL	12 CONTAINMENT FAN COIL OUTLET	NF-39216-4	14	B	ACT-BOTH	SP-1158	E	Q	
MV32136	CL	12 CONTAINMENT FAN COIL OUTLET	NF-39216-3	14	B	ACT-BOTH	SP-1158	E	Q	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
MV32138	CL	13 CONTAINMENT FAN COIL OUTLET	NF-39216-4	14	B	ACT-BOTH	SP-1158	E	Q	
MV32139	CL	13 CONTAINMENT FAN COIL OUTLET	NF-39216-3	14	B	ACT-BOTH	SP-1158	E	Q	
MV32141	CL	14 CONTAINMENT FAN COIL OUTLET	NF-39216-4	14	B	ACT-BOTH	SP-1158	E	Q	
MV32142	CL	14 CONTAINMENT FAN COIL OUTLET	NF-39216-3	14	B	ACT-BOTH	SP-1158	E	Q	
MV32144	CL	LOOP A/B CLG WTR HDR XOVR MV A	NF-39216	14	B	ACT-CLOSE	SP-1158	E	Q	
MV32145	CL	11 COMP CLG HT EXGR CLG WTR MV	NF-39216	14	B	ACT-OPEN	SP-1155	E	Q	
MV32146	CL	12 COMP CLG HT EXGR CLG WTR MV	NF-39216	14	B	ACT-OPEN	SP-1155	E	Q	
MV32322	CL	24 " CLG WTR RETURN UNIT 1	NF-39216	14	B	ACT-OPEN	SP-1158	E	Q	
MV32332	CL	24 " CLG WTR RETURN UNIT 1	NF-39216	14	B	PAS-OPEN		PV	2Y	
MV32377	CL	11 CONTAINMENT FAN COIL INLET	NF-39216	14	B	ACT-BOTH	SP-1158	E	Q	
MV32378	CL	13 CONTAINMENT FAN COIL INLET	NF-39216	14	B	ACT-BOTH	SP-1158	E	Q	
MV32379	CL	12 CONTAINMENT FAN COIL INLET	NF-39216	14	B	ACT-BOTH	SP-1158	E	Q	
MV32380	CL	14 CONTAINMENT FAN COIL INLET	NF-39216	14	B	ACT-BOTH	SP-1158	E	Q	
SV33133	CL	CL TO 121 SFGRDS TRVLNG SCRIN	NF-39216	14	B	PAS-CLOSE		PV	2Y	
SV33134	CL	CL TO 122 SFGRDS TRVLNG SCRIN	NF-39216	14	B	PAS-CLOSE		PV	2Y	
CL-76-3	CL	CV-31769 BYPASS	NF-39603-3	28	B	ACT-OPEN		E	Q	
CL-76-4	CL	CV-31785 BYPASS	NF-39603-3	28	B	ACT-OPEN		E	Q	
CL-31381	CL	11 CC HEAT EXCH CL OUT TCY	NF-39216	14	B	ACT-OPEN		E	CS	
CL-31411	CL	11 CC HEAT EXCH CL OUT TCY	NF-39216	14	B	ACT-OPEN		E	CS	
CS-16	CS	12 CONT SPRAY PUMP SUCT CHK	NF-39237	19	C	ACT-BOTH		E	R	
CS-17	CS	12 CONT SPRAY PUMP SUCT CHK	NF-39237	19	C	ACT-BOTH		E	R	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CS-18	CS	11 CONT SPRAY PUMP DISCH CHK VLV	NF-39237	19	A, C	ACT-BOTH		E	R	
							SP-1072.29B	LT	R	
CS-19	CS	12 CONT SPRAY PUMP DISCH CHK VLV	NF-39237	19	A, C	ACT-BOTH		E	R	
							SP-1072.29A	LT	R	
CS-22-1	CS	11 CONT SPRAY PUMP SUCT RELIEF	NF-39237	19	C	ACT-BOTH	P3120-14-11A	SP	10Y	
CS-22-2	CS	12 CONT SPRAY PUMP SUCT RELIEF	NF-39237	19	C	ACT-BOTH	P3120-14-12A	SP	10Y	
MV32096	CS	11 CONT SPRAY PUMP SUCT	NF-39237	19	B	ACT-OPEN	SP-1137	E	R	
MV32097	CS	12 CONT SPRAY PUMP SUCT	NF-39237	19	B	ACT-OPEN	SP-1137	E	R	
MV32098	CS	11 CONT SPRAY PUMP SUCT	NF-39237	19	B	ACT-BOTH	SP-1137	E	R	
MV32099	CS	12 CONT SPRAY PUMP SUCT	NF-39237	19	B	ACT-BOTH	SP-1137	E	R	
MV32103	CS	11 CONT SPRAY PUMP DISCH	NF-39237	19	A	ACT-BOTH	SP-1241/1137	E	CS	
							SP-1072.29B	LT	R	
MV32105	CS	12 CONT SPRAY PUMP DISCH	NF-39237	19	A	ACT-BOTH	SP-1241/1137	E	CS	
							SP-1072.29A	LT	R	
F-8-1	FW	FEEDWATER TO #11 STEAM GENERATOR CHK	NF-39222	16	C	ACT-CLOSE		E	CS	
F-8-2	FW	FEEDWATER TO #12 STEAM GENERATOR CHK	NF-39222	16	C	ACT-CLOSE		E	CS	
MV32023	FW	FDWTR TO #11 STM GEN	NF-39222	16	B	ACT-CLOSE		E	CS	
MV32024	FW	FDWTR TO #12 STM GEN	NF-39222	16	B	ACT-CLOSE		E	CS	
HC-1-3	HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	B	ACT-OPEN	SP-1157	E	CS	
HC-1-4	HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	B	ACT-OPEN	SP-1157	E	CS	
HC-1-5	HC	EMERGENCY AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	B	ACT-OPEN	SP-1157	E	CS	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
HC-1-6	HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	B	ACT-OPEN	SP-1072.50	E	CS	
HC-2-1	HC	INST & EMERG AIR TO INSIDE CNTMT VESSEL CK	NF-39251	25	A, C	ACT-BOTH		E	CS	
							SP-1072.50	LT	R	
HC-2-2	HC	INST & EMERG AIR TO INSIDE CNTMT VESSEL CK	NF-39251	25	A, C	ACT-BOTH		E	CS	
							SP-1072.42A	LT	R	
CV31923	HC	POST LOCA TO FI ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-1072.50	LT	R	
CV31925	HC	POST LOCA TO GA ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-1072.50	LT	R	
CV31927	HC	POST LOCA TO GA ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-1072.42A	LT	R	
CV31929	HC	POST LOCA TO FI ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-1072.42A	LT	R	
MV32271	HC	POST LOCA VENT ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-1072.50	LT	R	
MV32273	HC	POST LOCA VENT ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-1072.42A	LT	R	
MV32274	HC	POST LOCA SUPPLY ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-1072.50	LT	R	
MV32276	HC	POST LOCA SUPPLY ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-1072.42A	LT	R	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
RS-15-1	MS	FROM #12 STM GEN TO #11 AUX FDWTR PUMP CHK	NF-39218	15	C	ACT-BOTH		E	CS	
RS-15-2	MS	FROM #11 STM GEN TO #11 AUX FDWTR PUMP CHK	NF-39218	15	C	ACT-BOTH		E	CS	
RS-19-1	MS	STM GEN 11 OUTLET CHECK	NF-39218	15	C	ACT-CLOSE		E	CS	
RS-19-2	MS	STM GEN 12 OUTLET CHECK	NF-39218	15	C	ACT-CLOSE		E	CS	
RS-21-1	MS	11 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS-21-10	MS	12 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS-21-2	MS	11 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS-21-3	MS	11 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS-21-4	MS	11 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS-21-5	MS	11 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS-21-6	MS	12 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS-21-7	MS	12 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS-21-8	MS	12 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS-21-9	MS	12 STM RELIEF HDR	NF-39218	15	C	ACT-BOTH	P3120-52-1	SP	10Y	
CV31098	MS	11 LOOP A MN STM HDR ISOL	NF-39218	15	B	ACT-CLOSE	SP-1099	E	CS	
CV31099	MS	12 LOOP B MN STM HDR ISOL	NF-39218	15	B	ACT-CLOSE	SP-1099	E	CS	
CV31998	MS	11 TD AFWP MN STM SUPPLY	NF-39218	15	B	ACT-OPEN	SP-1102	E	Q	
MV32016	MS	LOOP A MN STM TO 11 TD AFWP MV	NF-39218	15	B	PAS-OPEN		PV	2Y	
MV32017	MS	LOOP B MN STM TO 11 TD AFWP MV	NF-39218	15	B	PAS-OPEN		PV	2Y	
MV32045	MS	1 LOOP A MN STM HDR EQLZG MV	NF-39218	15	B	PAS-CLOSE		PV	2Y	
MV32047	MS	1 LOOP B MN STM HDR EQLZG MV	NF-39218	15	B	PAS-CLOSE		PV	2Y	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
RUPT DISC	MS	AF EXH	NF-39218	15	D	PASSIVE		SP	5Y	
RC-10-1	RC	PRESSURIZER RELIEF VALVE	HIAW 1-7	2	C	ACT-BOTH	P3120-57-1A	SP	5Y	
RC-10-2	RC	PRESSURIZER RELIEF VALVE	HIAW 1-7	2	C	ACT-BOTH	P3120-57-1B	SP	5Y	
RC-3-1	RC	REACTOR MAKEUP WATER TO PRZR RELIEF TANK	HIAW 1-7	2	A, C	ACT-CLOSE		E	CS	
							SP-1072.45	LT	R	
RC-5-1	RC	NITROGEN SUPPLY LINE TO PRZR RELIEF TANK	HIAW 1-7	2	A, C	ACT-CLOSE		E	CS	
							SP-1072.2	LT	R	
CV31221	RC	PRT N2 SUPPLY ISOL	HIAW 1-7	2	A	ACT-CLOSE	SP-1272	E	Q	
							SP-1072.2	LT	R	
CV31231	RC	PRESSURIZER OUTLET TO PRZR RLF TNK A	HIAW 1-7	2	B	ACT-BOTH	SP-1291	E	CS	
CV31232	RC	PRESSURIZER OUTLET TO PRZR RLF TNK B	HIAW 1-7	2	B	ACT-BOTH	SP-1291	E	CS	
CV31318	RC	PRT SAMPLE TO GA	HIAW 1-7	2	A	ACT-CLOSE	SP-1246	E	Q	
							SP-1072.1	LT	R	
CV31319	RC	PRT SAMPLE TO GA	HIAW 1-7	2	A	ACT-CLOSE	SP-1246	E	Q	
							SP-1072.1	LT	R	
CV31321	RC	RTR M/U WATER TO PRT ISOL	HIAW 1-7	2	A	ACT-CLOSE	SP-1272	E	Q	
							SP-1072.45	LT	R	
MV32195	RC	PRESSURIZER OUTLET TO PRZR RLF TNK A	HIAW 1-7	2	B	ACT-BOTH	SP-1265	E	Q	
MV32196	RC	PRESSURIZER OUTLET TO PRZR RLF TNK B	HIAW 1-7	2	B	ACT-BOTH	SP-1265	E	Q	
SV37035	RC	PRESSURIZER VENT VALVE A	HIAW 1-7	2	B	ACT-BOTH	SP-1248	E	R	
SV37036	RC	PRESSURIZER VENT VALVE B	HIAW 1-7	2	B	ACT-BOTH	SP-1248	E	R	



## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
SV37037	RC	RTR HEAD VENT VALVE A	HIAW 1-7	2	B	ACT-BOTH	SP-1248	E	R	
SV37038	RC	RTR HEAD VENT VALVE B	HIAW 1-7	2	B	ACT-BOTH	SP-1248	E	R	
SV37039	RC	VENT TO PRT VALVE A	HIAW 1-7	2	B	ACT-BOTH	SP-1248	E	R	
SV37040	RC	VENT TO CNTMT ATMOSPHERE	HIAW 1-7	2	B	ACT-BOTH	SP-1248	E	R	
CV31019	RD	RAD MON 2R-11 & 2R-12 SMPL RTN	NF-39790-3	N/A	A	ACT-CLOSE	SP-1244	E	Q	
							SP-1072.23	LT	R	
CV31022	RD	RAD MON 2R-11 & 2R-12 SMPL RTN	NF-39790-3	N/A	A	ACT-CLOSE	SP-1244	E	Q	
							SP-1072.22	LT	R	
CV31092	RD	RAD MON 2R-11 & 2R-12 SMPL INLET	NF-39790-3	N/A	A	ACT-CLOSE	SP-1244	E	Q	
							SP-1072.22	LT	R	
CV31750	RD	RAD MON 2R-11 & 2R-12 SMPL INLET	NF-39790-3	N/A	A	ACT-CLOSE	SP-1244	E	Q	
							SP-1072.23	LT	R	
RH-3-1	RH	RHR PUMP #12 SUCT LINE CHECK	HIAW 1-31	3	C	ACT-CLOSE		E	R	
RH-3-2	RH	RHR PUMP #11 SUCT LINE CHECK	HIAW 1-31	3	C	ACT-CLOSE		E	R	
RH-3-3	RH	RHR PUMP #12 DISCH LINE CHECK	HIAW 1-31	3	C	ACT-OPEN		E	CS	
RH-3-4	RH	RHR PUMP #11 DISCH LINE CHECK	HIAW 1-31	3	C	ACT-OPEN		E	CS	
RH-6-1	RH	2 IN LETDOWN LINE BY-PASS CHK	HIAW 1-31	3	C	ACT-OPEN		E	CS	
RH-8-1	RH	RHR PUMP #11 & #12 SUCTION RELIEF	HIAW 1-31	3	C	ACT-BOTH	P3120-59-1A	SP	10Y	
CV31235	RH	RH EXCH #11 OUTLET	HIAW 1-31	3	B	PAS-OPEN		PV	2Y	
CV31236	RH	RH EXCH #12 OUTLET	HIAW 1-31	3	B	PAS-OPEN		PV	2Y	
MV32066	RH	DOWNSTREAM OF CV-31236	HIAW 1-31	3	A	PAS-CLOSE	SP-1273	PV	2Y	



## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
							SP-1070	LT	R	
MV32164	RH	1 REAC LOOP A RSDL HT RMVL ISOL MV A	HIAW 1-31	3	A	PAS-CLOSE	SP-1273	PV	2Y	
							SP-1070	LT	R	
MV32165	RH	1 REAC LOOP A RSDL HT RMVL ISOL MV B	HIAW 1-31	3	A	PAS-CLOSE	SP-1273	PV	2Y	
							SP-1070	LT	R	
MV32230	RH	1 REAC LOOP B RSDL HT RMVL ISOL MV A	HIAW 1-31	3	A	PAS-CLOSE	SP-1273	PV	2Y	
							SP-1070	LT	R	
MV32231	RH	1 REAC LOOP B RSDL HT RMVL ISOL MV B	HIAW 1-31	3	A	PAS-CLOSE	SP-1273	PV	2Y	
							SP-1070	LT	R	
CV31740	SA	1 CNTMT INST AIR ISOL VLV A	NF-39244	N/A	A	ACT-CLOSE		E	R	
							SP-1072.20	LT	R	
CV31741	SA	1 CNTMT INST AIR ISOL VLV B	NF-39244	N/A	A	ACT-CLOSE		E	R	
							SP-1072.20	LT	R	
MV32040	SB	11 SGB ISOL MV	NF-88740	24	B	ACT-CLOSE	SP-1267	E	Q	
MV32043	SB	12 SGB ISOL MV	NF-88740	24	B	ACT-CLOSE	SP-1267	E	Q	
MV32044	SB	11 SGB ISOL MV	NF-88740	24	B	ACT-CLOSE	SP-1267	E	Q	
MV32058	SB	12 SGB ISOL MV	NF-88740	24	B	ACT-CLOSE	SP-1267	E	Q	
SI-10-1	SI	SAFETY INJECTION PUMP 11 DISCH CHK	HIAW 1-45	9	C	ACT-OPEN	SP-1092A	E	R	
					C	ACT-CLOSE	SP-1070	E	R	
SI-10-2	SI	SAFETY INJECTION PUMP 12 DISCH CHK	HIAW 1-45	9	C	ACT-OPEN	SP-1092A	E	R	
					C	ACT-CLOSE	SP-1070	E	R	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
SI-16-1	SI	FROM SI PUMP 11 DISCH TO TEST LINE	HIAW 1-45	9	C	ACT-OPEN	SP-1088	E	Q	
SI-16-2	SI	FROM SI PUMP 12 DISCH TO TEST LINE	HIAW 1-45	9	C	ACT-OPEN	SP-1088	E	Q	
SI-16-3	SI	FR RWST OUTLET LINE TO SI PUMP SUCT	HIAW 1-45	9	C	ACT-OPEN	SP-1088	E	Q	
SI-16-4	SI	COLD LEG INJECTION LINE TO LOOP B COLD LEG	HIAW 1-44	8	C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	E	R	
SI-16-5	SI	COLD LEG INJECTION LINE TO LOOP A COLD LEG	HIAW 1-44	8	C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	E	R	
SI-16-6	SI	REACTOR VESSEL INJ LINE TO REACTOR VESSEL	HIAW 1-44	8	C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	E	R	
SI-16-7	SI	REACTOR VESSEL INJ LINE TO REACTOR VESSEL	HIAW 1-44	8	C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	E	R	
SI-25-1	SI	ACCUMULATOR 11 RELIEF	HIAW 1-44	8	C	ACT-BOTH	P3120-69-11B	SP	10Y	
SI-25-2	SI	ACCUMULATOR 12 RELIEF	HIAW 1-44	8	C	ACT-BOTH	P3120-69-12B	SP	10Y	
SI-26-1	SI	LO HEAD TO REAC VSL RELIEF	HIAW 1-44	8	C	ACT-BOTH	P3120-69-1A	SP	10Y	
SI-4-1	SI	11 SI PUMP SUCT LINE RELIEF	HIAW 1-45	9	C	ACT-BOTH	P3120-69-11A	SP	10Y	
SI-4-2	SI	12 SI PUMP SUCT LINE RELIEF	HIAW 1-45	9	C	ACT-BOTH	P3120-69-12A	SP	10Y	
SI-6-1	SI	ACC #12 OUTLET TO LOOP B COLD LEG CHECK	HIAW 1-44	8	A, C	ACT-OPEN	SP-1092C	E	R	
						ACT-CLOSE	SP-1070	LT	R	
SI-6-2	SI	DOWNSTREAM OF CHECK SI-6-1	HIAW 1-44	8	A, C	ACT-OPEN	SP-1092C	E	R	
						ACT-CLOSE	SP-1269	LT	R	
SI-6-3	SI	ACC #11 12 OUTLET TO LOOP A COLD LEG CHK	HIAW 1-44	8	A, C	ACT-OPEN	SP-1092C	E	R	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
						ACT-CLOSE	SP-1070	LT	R	
SI-6-4	SI	DOWNSTREAM OF CHECK SI-6-3	HIAW 1-44	8	A, C	ACT-OPEN	SP-1092C	E	R	
						ACT-CLOSE	SP-1269	LT	R	
SI-7-1	SI	FR REFUELING WTR STR TK TO RHR PUMP SUCT	HIAW 1-45	9	C	ACT-OPEN	SP-1092B	E	R	
						ACT-CLOSE		E	R	
SI-7-2	SI	FR REFUELING WTR STR TK TO RHR PUMP SUCT	HIAW 1-45	9	C	ACT-OPEN	SP-1092B	E	R	
						ACT-CLOSE		E	R	
SI-8-1	SI	FROM BORIC ACID TNKS TO SI PUMPS	HIAW 1-45	9	B	PAS-OPEN		PV	2Y	
SI-8-2	SI	FROM BORIC ACID TNKS TO SI PUMPS	HIAW 1-45	9	B	PAS-CLOSE		PV	2Y	
SI-9-1	SI	COLD LEG INJ LINE TO LOOP B COLD LEG CHK	HIAW 1-44	8	C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	E	R	
SI-9-2	SI	COLD LEG INJ LINE TO LOOP A COLD LEG CHK	HIAW 1-44	8	C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	E	R	
SI-9-3	SI	FROM RESIDUAL HT EXCH TO Rx VESSEL CHK	HIAW 1-44	8	A, C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	LT	R	
SI-9-4	SI	FROM RESIDUAL HT EXCH TO Rx VESSEL CHK	HIAW 1-44	8	A, C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	LT	R	
SI-9-5	SI	FROM RH EXCH TO REACTOR VESSEL CHK	HIAW 1-44	8	A, C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	LT	R	
SI-9-6	SI	FROM RH EXCH TO REACTOR VESSEL CHK	HIAW 1-44	8	A, C	ACT-OPEN	SP-1092A	E	R	
						ACT-CLOSE	SP-1070	LT	R	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31242	SI	N2 SUPPLY TO ACC HCV	HIAW 1-44	8	A	PAS-CLOSE		PV	2Y	
							SP-1072.31	LT	R	
CV31440	SI	N2 SUPPLY TO ACC CONTMNT ISOL	HIAW 1-44	8	A	ACT-CLOSE		E	Q	
							SP-1072.31	LT	R	
CV31441	SI	N2 SUPPLY TO 11 ACC ISOL	HIAW 1-44	8	A	ACT-CLOSE		E	CS	
							SP-1072.31	LT	R	
CV31443	SI	ACC TO RCDT	HIAW 1-44	8	B	ACT-CLOSE		E	CS	
CV31444	SI	N2 SUPPLY TO 12 ACC ISOL	HIAW 1-44	8	A	ACT-CLOSE		E	CS	
							SP-1072.31	LT	R	
CV31446	SI	ACC TO RCDT	HIAW 1-44	8	B	ACT-CLOSE		E	CS	
CV31447	SI	ACC AFTER CK TEST VLV	HIAW 1-44	8	B	PAS-CLOSE	SP-1070	PV	2Y	
CV31449	SI	ACC AFTER CK TEST VLV	HIAW 1-44	8	B	PAS-CLOSE	SP-1070	PV	2Y	
MV32064	SI	FR RH EXCH TO REACTOR VESSEL	HIAW 1-44	8	B	PAS-OPEN		PV	2Y	
MV32065	SI	FR RH EXCH TO REACTOR VESSEL	HIAW 1-44	8	B	PAS-OPEN		PV	2Y	
MV32067	SI	1 SAF INJ REAC VSL INJ ISOL MV B	HIAW 1-44	8	B	ACT-OPEN	SP-1236	E	CS	
MV32068	SI	1 SAF INJ LOOP B COLD LEG ISOL MV	HIAW 1-44	8	B	PAS-OPEN		PV	2Y	
MV32069	SI	1 SAF INJ REAC VSL INJ ISOL MV A	HIAW 1-44	8	B	ACT-OPEN	SP-1236	E	CS	
MV32070	SI	1 SAF INJ LOOP A COLD LEG ISOL MV	HIAW 1-44	8	B	PAS-OPEN		PV	2Y	
MV32071	SI	ACCUMULATOR 11 12 IN OUTLET	HIAW 1-44	8	B	PAS-OPEN		PV	2Y	
MV32072	SI	ACCUMULATOR 12 12 IN OUTLET	HIAW 1-44	8	B	PAS-OPEN		PV	2Y	
MV32073	SI	1 SAF INJ COLD LEG INJ ISOL MV	HIAW 1-44	8	B	PAS-OPEN		PV	2Y	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
MV32074	SI	1 SAF INJ REAC VSL INJ ISOL MV	HIAW 1-44	8	B	PAS-OPEN		PV	2Y	
MV32075	SI	11 CONTM SMP B ISOL MV A1	HIAW 1-44	8	A	ACT-BOTH	SP-1137	E	R	#3
							SP-1072.30A	LT	R	
MV32076	SI	11 CONTM SMP B ISOL MV A2	HIAW 1-44	8	A	ACT-BOTH	SP-1137	E	R	#3
							SP-1072.30B	LT	R	
MV32077	SI	11 CONTM SMP B ISOL MV B1	HIAW 1-44	8	B	ACT-BOTH	SP-1137	E	R	
MV32078	SI	11 CONTM SMP B ISOL MV B2	HIAW 1-44	8	B	ACT-BOTH	SP-1137	E	R	
MV32079	SI	REF WTR STR TK OUTLET	HIAW 1-45	9	B	ACT-OPEN	SP-1088	E	Q	
MV32080	SI	REF WTR STR TK OUTLET	HIAW 1-45	9	B	ACT-OPEN	SP-1088	E	Q	
MV32081	SI	BAST TO 11 & 12 SI PUMP SUCTION MV A	HIAW 1-45	9	B	ACT-BOTH	SP-1088	E	Q	
MV32082	SI	BAST TO 11 & 12 SI PUMP SUCTION MV B	HIAW 1-45	9	B	ACT-BOTH	SP-1088	E	Q	
MV32083	SI	BAST TO 11 & 12 SI PUMP SUCTION MV C	HIAW 1-45	9	B	PAS-OPEN		PV	2Y	
MV32084	SI	RFLG WTR TO 11 RSDL HT RMVL PMP ISOL MV	HIAW 1-45	9	B	PAS-OPEN		PV	2Y	
MV32085	SI	RFLG WTR TO 12 RSDL HT RMVL PMP ISOL MV	HIAW 1-45	9	B	PAS-OPEN		PV	2Y	
MV32162	SI	SI PUMP 11 Suction LINE	HIAW 1-45	9	B	ACT-BOTH	SP-1236	E	CS	
MV32163	SI	SI PUMP 12 Suction LINE	HIAW 1-45	9	B	ACT-BOTH	SP-1236	E	CS	
MV32202	SI	SAF INJ TEST TO 11 RFLG WTR STOR TNK MV A	HIAW 1-45	9	B	ACT-BOTH	SP-1236	E	CS	
MV32203	SI	SAF INJ TEST TO 11 RFLG WTR STOR TNK MV B	HIAW 1-45	9	B	ACT-BOTH	SP-1236	E	CS	
MV32206	SI	FR RH EXCH TO SI PUMP 11 SUCT	HIAW 1-45	9	B	ACT-OPEN	SP-1137	E	R	
MV32207	SI	FR RH EXCH TO SI PUMP 12 SUCT	HIAW 1-45	9	B	ACT-OPEN	SP-1137	E	R	
CV31402	SS	1A SGB SAMPLE # SM-35 (OUTSIDE CNTMT)	NF 39238	20	B	ACT-CLOSE		E	Q	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31403	SS	1B SGB SAMPLE # SM-36(OUTSIDE CNTMT)	NF-39238	20	B	ACT-CLOSE		E	Q	
CV31637	SS	1A SGB SAMPLE # SM-35 (INSIDE CNTMT)	NF-39238	20	B	ACT-CLOSE		E	Q	
CV31638	SS	1B SGB SAMPLE # SM-36 (INSIDE CNTMT)	NF-39238	20	B	ACT-CLOSE		E	Q	
MV32400	SS	PRZR STEAM SPACE SAMPLE VLV A	NF-39238	20	A	ACT-CLOSE	SP-1242	E	Q	
							SP-1072.15	LT	R	
MV32401	SS	PRZR STEAM SPACE SAMPLE VLV B	NF-39238	20	A	ACT-CLOSE	SP-1242	E	Q	
							SP-1072.15	LT	R	
MV32402	SS	PRZR LIQ SAMPLE VLV A	NF-39238	20	A	ACT-CLOSE	SP-1242	E	Q	
							SP-1072.16	LT	R	
MV32403	SS	PRZR LIQ SAMPLE VLV B	NF-39238	20	A	ACT-CLOSE	SP-1242	E	Q	
							SP-1072.16	LT	R	
MV32404	SS	LOOP B HOT LEG SMPL	NF-39238	20	A	ACT-CLOSE	SP-1242	E	Q	
							SP-1072.17	LT	R	
MV32405	SS	LOOP B HOT LEG SMPL	NF-39238	20	A	ACT-CLOSE	SP-1242	E	Q	
							SP-1072.17	LT	R	
SM-10-1	VC	SAMPLE RET LINE TO VOL CONTR TANK	NF-39238	5	C	ACT-CLOSE		E	R	
VC-13-1	VC	VOLUME CONTROL TANK INLET CHK	HIAW 1-39	5	C	ACT-CLOSE		E	R	
VC-13-2	VC	CHEM MIX TK #11 OUTLET TO VCT OUTLET CHK	HIAW 1-39	5	C	ACT-CLOSE		E	CS	
VC-14-1	VC	SEAL WTR INJECT FILTERS TO RC PUMP #11 CHK	HIAW 1-38	4	A	ACT-CLOSE	SP-1279	E	CS	
							SP-1072.13A	LT	R	
VC-14-2	VC	SEAL WTR INJECT FILTERS TO RC PUMP #12 CHK	HIAW 1-38	4	A	ACT-CLOSE	SP-1279	E	CS	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
							SP-1072.13B	LT	R	
VC-17-1	VC	CHARGING LINE CV-31328 BY-PASS CHK	HIAW 1-38	4	C	ACT-CLOSE		E	CS	
VC-24-1	VC	VOLUME CONTROL TANK #11 RELIEF	HIAW 1-39	5	C	ACT-BOTH	P3120-75-1A	SP	10Y	
VC-25-1	VC	RCP DISCH LINE TO SEAL WTR FILTER RELIEF	HIAW 1-38	4	C	ACT-BOTH	P3120-75-1B	SP	10Y	
VC-26-1	VC	REGEN HEAT EXCH #11 LETDOWN LINE OUT RELIEF	HIAW 1-38	4	C	ACT-BOTH	P3120-75-1C	SP	10Y	
VC-28-1	VC	11 CHG PUMP DISCH RELIEF	HIAW 1-39	5	C	ACT-BOTH	P3120-75-11A	SP	10Y	
VC-28-2	VC	12 CHG PUMP DISCH RELIEF	HIAW 1-39	5	C	ACT-BOTH	P3120-75-12A	SP	10Y	
VC-28-3	VC	13 CHG PUMP DISCH RELIEF	HIAW 1-39	5	C	ACT-BOTH	P3120-75-13A	SP	10Y	
VC-7-10	VC	1-HCV-142 BY-PASS	HIAW 1-38	5	A	PAS-CLOSE		PV	2Y	
	VC						SP-1072.12	LT	R	
VC-7-11	VC	DOWNSTREAM OF 1-HCV-142	HIAW 1-39	5	A	ACT-CLOSE		E	CS	
							SP-1072.12	LT	R	
VC-8-1	VC	UPSTREAM OF REGENERATIVE HEAT EXCH #11	HIAW 1-38	4	A, C	ACT-CLOSE		E	CS	
							SP-1072.12	LT	R	
VC-8-10	VC	DOWNSTREAM OF 1-LCV-112A	HIAW 1-39	5	C	ACT-CLOSE		E	CS	
VC-8-11	VC	BORIC ACID BLENDER SUCTION	HIAW 1-39	5	C	ACT-CLOSE		E	CS	
VC-8-14	VC	RMW TO CHARGING PUMP SUCT	HIAW 1-39	5	C	ACT-CLOSE		E	CS	
VC-8-2	VC	DWNSTRM OF REGENERATIVE HEAT EXCH #11	HIAW 1-38	4	C	ACT-CLOSE	SP-1237	E	CS	
VC-8-3	VC	11 REGEN HX AUX SPRY TO 11 PRZR CV31329	HIAW 1-38	4	C	ACT-CLOSE		E	CS	
VC-8-4	VC	RC PUMP #12 SUCTION	HIAW 1-38	4	A, C	ACT-CLOSE	SP-1166	E	R	
							SP-1072.13B	LT	R	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
VC-8-5	VC	RC PUMP #11 SUCTION	HIAW 1-38	4	A, C	ACT-CLOSE	SP-1166	E	R	
							SP-1072.13A	LT	R	
VC-8-6	VC	RC PUMP #12 SUCTION	HIAW 1-38	4	C	ACT-CLOSE	SP-1166	E	R	
VC-8-7	VC	RC PUMP #11 SUCTION	HIAW 1-38	4	C	ACT-CLOSE	SP-1166	E	R	
CV31198	VC	CHG LINE HCV	HIAW 1-39	5	A	ACT-CLOSE		E	CS	
							SP-1072.12	LT	R	
CV31210	VC	EXCESS LETDOWN HEAT EXCH OUTLET	HIAW 1-38	4	B	ACT-CLOSE		E	CS	
CV31226	VC	1 REAC CLNT LOOP PZR LTDN LN ISOL	HIAW 1-7	2	B	ACT-CLOSE	SP-1162	E	CS	
CV31255	VC	1 REAC CLNT LOOP PZR LTDN LN ISOL	HIAW 1-7	2	B	ACT-CLOSE	SP-1162	E	CS	
CV31325	VC	LETDOWN ORIFICE ISOL	HIAW 1-38	4	A	ACT-CLOSE	SP-1162	E	CS	
							SP-1072.11	LT	R	
CV31326	VC	LETDOWN ORIFICE ISOL	HIAW 1-38	4	A	ACT-CLOSE	SP-1162	E	CS	
							SP-1072.11	LT	R	
CV31327	VC	LETDOWN ORIFICE ISOL	HIAW 1-38	4	A	ACT-CLOSE	SP-1162	E	CS	
							SP-1072.11	LT	R	
CV31330	VC	EXCESS LETDOWN HEAT EXCH INLET	HIAW 1-38	4	B	ACT-CLOSE		E	CS	
CV31333	VC	EXCESS LETDOWN HEAT EXCH TO SL WTR FILTR	HIAW 1-38	4	B	PAS-NOTE 2		PV	2Y	
CV31339	VC	LETDOWN CNTMT ISOL	HIAW 1-38	4	A	ACT-CLOSE	SP-1162	E	CS	
							SP-1072.11	LT	R	
MV32166	VC	SEAL RETURN CONT ISOL	HIAW 1-38	4	A	ACT-CLOSE	SP-1280	E	CS	
							SP-1072.11	LT	R	



## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
MV32199	VC	SEAL RETURN CONT ISOL	HIAW 1-38	4	A	ACT-CLOSE	SP-1280	E	CS	
							SP-1072.14	LT	R	
CV31434	WL	RCDT TO VENT HDR CNTMT ISOL VLV A	HIAW 1-123	N/A	A	ACT-CLOSE	SP-1284	E	Q	
							SP-1072.4	LT	R	
CV31435	WL	RCDT TO VENT HDR CNTMT ISOL VLV B	HIAW 1-123	N/A	A	ACT-CLOSE	SP-1284	E	Q	
							SP-1072.4	LT	R	
CV31436	WL	RCDT DISCH CNTMT ISOL VLV A	HIAW 1-123	N/A	A	ACT-CLOSE	SP-1284	E	Q	
							SP-1072.5	LT	R	
CV31437	WL	RCDT DISCH CNTMT ISOL VLV B	HIAW 1-123	N/A	A	ACT-CLOSE	SP-1284	E	Q	
							SP-1072.5	LT	R	
CV31438	WL	SUMP A DISCH CNTMT ISOL VLV A	HIAW 1-123	N/A	A	ACT-CLOSE	SP-1284	E	Q	
							SP-1072.26	LT	R	
CV31439	WL	SUMP A DISCH CNTMT ISOL VLV B	HIAW 1-123	N/A	A	ACT-CLOSE	SP-1284	E	Q	
							SP-1072.26	LT	R	
CV31545	WL	RCDT TO GA CNTMT ISOL VLV A	HIAW 1-123	N/A	A	ACT-CLOSE	SP-1284	E	Q	
							SP-1072.21	LT	R	
CV31546	WL	RCDT TO GA CNTMT ISOL VLV B	HIAW 1-123	N/A	A	ACT-CLOSE	SP-1284	E	Q	
							SP-1072.21	LT	R	
ZH-2-1	ZH	121 CHILL WATER PUMP DISCHARGE	NF-39603-3	28	C	ACT-OPEN	SP-1161	E	Q	
ZH-2-2	ZH	122 CHILL WATER PUMP DISCHARGE	NF-39603-3	28	C	ACT-OPEN	SP-1161	E	Q	
ZH-23-1	ZH	LOOP A CW SUPPLY HDRS - CROSS-CONN	NF-39603-3	28	C	ACT-OPEN	SP-1161	E	Q	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
ZH-23-2	ZH	LOOP B CW SUPPLY HDRS - CROSS-CONN	NF-39603-3	28	C	ACT-OPEN	SP-1161	E	Q	
CV31837	ZH	121/122 CNTRL RM WTR CHLLR OUTLET X-OVER	NF-39603-3	28	B	ACT-CLOSE	SP-1160	E	Q	
CV31838	ZH	121/122 CNTRL RM WTR CHLLR INLET X-OVER	NF-39603-3	28	B	ACT-CLOSE	SP-1160	E	Q	
SV33728	ZH	121 CONTROL ROOM WTR CHLLR MTR CLR	NF-39603-4	28	B	ACT-OPEN	SP-1161	E	Q	
SV33766	ZH	122 CONTROL ROOM WTR CHLLR MTR CLR	NF-39603-4	28	B	ACT-OPEN	SP-1161	E	Q	
CV31310	ZP	INSERVICE PURGE EXH ISOL B	NF-39601-1	N/A	A	ACT-CLOSE		E	AR	
								LT	R	
CV31311	ZP	INSERVICE PURGE EXH ISOL A	NF-39601-1	N/A	A	ACT-CLOSE		E	AR	
								LT	R	
CV31621	ZP	CNTMT VAC BRKR PWR OP	NF-39602-1	N/A	A	ACT-BOTH	SP-1130	E	Q	
							SP-1072.41A	LT	R	
CV31322	ZP	CNTMT VAC BRKR PWR OP	NF-39602-1	N/A	A	ACT-BOTH	SP-1130	E	Q	
							SP-1072.41B	LT	R	
CV31624	ZP	CNTMT VAC BRKR GRAV OP	NF-39602-1	N/A	A, C	ACT-BOTH	SP-1130	E	Q	
							SP-1072.41A	LT	R	
CV31625	ZP	CNTMT VAC BRKR GRAV OP	NF-39602-1	N/A	A, C	ACT-BOTH	SP-1130	E	Q	
							SP-1072.41B	LT	R	
CV31633	ZP	INSERVICE PURGE SUPPLY ISOL B	NF-39601-1	N/A	A	ACT-CLOSE		E	AR	
								LT	R	
CV31634	ZP	INSERVICE PURGE SUPPLY ISOL A	NF-39601-1	N/A	A	ACT-CLOSE		E	AR	
								LT	R	

## ASME SECTION XI VALVES UNIT 1

<i>Valve Number</i>	<i>Sys</i>	<i>Description</i>	<i>P&amp;ID</i>	<i>Code Dwg</i>	<i>Vlv Category</i>	<i>Vlv Function</i>	<i>Test Proc</i>	<i>Test Type</i>	<i>Test Freq</i>	<i>Relief Request</i>
CV39401	ZX	COOLING WATER TO 11 & 13 FCU	NF-86172-2	41	B	ACT-OPEN	SP-1245	E	Q	
CV39402	ZX	11& 13 FCU CHILLED WATER SUPPLY CV	NF-86172-2	41	B	ACT-CLOSE	SP-1245	E	C	
CV39403	ZX	COOLING WATER TO 12 & 14 FCU	NF-86172-2	41	B	ACT-OPEN	SP-1245	E	Q	
CV39404	ZX	12& 14 FCU CHILLED WATER SUPPLY CV	NF-86172-2	41	B	ACT-CLOSE	SP-1245	E	Q	
CV39405	ZX	11 SHROUD CLG COILS TR A CW SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-1245	E	Q	
CV39406	ZX	12 SHROUD CLG COILS TR B CW SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-1245	E	Q	
CV39407	ZX	11 SHROUD CLG COILS TR A CW SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-1245	E	Q	
CV39408	ZX	12 SHROUD CLG COILS TR B CW SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-1245	E	Q	
CV39409	ZX	COOLING WATER FROM 11 & 13 FCU	NF-86172-2	41	B	ACT-OPEN	SP-1245	E	Q	
CV39410	ZX	12& 14 FCU CHILLED WATER SUPPLY CV	NF-86172-2	41	B	ACT-CLOSE	SP-1245	E	Q	
CV39411	ZX	COOLING WATER FROM 12 & 14 FCU	NF-86172-2	41	B	ACT-OPEN	SP-1245	E	Q	
CV39412	ZX	11& 13 FCU CHILLED WATER SUPPLY CV	NF-86172-2	41	B	ACT-CLOSE	SP-1245	E	Q	

SECTION 1.4 REQUESTS FOR RELIEF FROM ASME CODE SECTION XI  
REQUIREMENTS DETERMINED TO BE IMPRACTICAL

UNIT NO 1 AND COMMON COMPONENTS

This section contains a tabulation of the requirements contained in Section XI of the ASME Code that we have determined are impractical on Unit 1 and common components.

The Requests for Relief included in the program for Unit 1 are listed below.

<u>REQUEST FOR RELIEF NO.</u>	<u>SUBJECT</u>
1	Pump Vibration
2	Flow Instrumentation Accuracy
3	Visual Verification of Valves
4	Pump Vibration Sensor Locations
5	Pump Hydraulic Measurement
6	Unused
7	Unused
8	Unused
9	Unused
10	Containment Spray Minimum Flow Line

The following Requests for Relief were not used for Unit 1: 6-9.

## 1. REQUEST FOR RELIEF

COMPONENT	FUNCTION	ASME Code Class	ASME Viv Cat
11, 12 Safety Injection Pump	Deliver cooling water to the reactor core in the event of a loss of coolant accident.	2	----
11, 12 Containment Spray Pump	Provide sufficient heat removal capability to maintain the post accident containment pressure below the design pressure.	2	----
11, 12 Component Cooling Pump	Remove heat from components associated with removal of reactor core decay heat under accident conditions	3	----
12, 22 Diesel Cooling Water Pump	Remove heat from components that must function during accident conditions	3	----

### CODE REQUIREMENT

Relief is requested from OMa 1988, part 6 Table 3 which requires vibration alert limits for centrifugal pumps to be  $>2.5V_r$  to  $6 V_r$  or  $> 0.325$  in/sec.

### ALTERNATE TESTING

Alert limits will be set using pump vibration history. Limits will be established per the Code unless the value becomes  $> 0.325$  inches/sec. In those cases the alert limit will be set at  $V_r + 0.2$  inches/sec.

## 1. REQUEST FOR RELIEF (CONT'D)

### ALTERNATE TESTING (CONT'D)

#### 11, 12 SI Pumps

Alert limits at locations on the pump which are above Code value will be compared with alert limits on the pump which are within Code acceptable values. Subsequent data will be evaluated based on pump vibration trending and history.

In addition to quarterly miniflow test data, full flow vibration data will be taken and analyzed once per refueling.

#### 11, 12 CS Pumps

Alert limits at locations on the pump which are above Code value will be compared with alert limits on the pump which are within Code acceptable values. Subsequent data will be evaluated based on pump vibration trending and history.

#### 11, 12 CC Pumps

Vibration limits depend on sensor location and pump flow. Limits will be established based on these variables.

#### 12, 22 Diesel Cooling Water Pumps

Vibration limits depend on sensor location and pump flow. Limits will be established based on these variables. Speed will be held constant while taking vibration data during all tests.

## 1. REQUEST FOR RELIEF (COND'T)

### BASIS FOR REQUESTING RELIEF

#### 11, 12 SI Pumps

The Code alert limits will not be met based on the higher vibration levels at minimum flow. The higher vibration levels are at higher frequencies which can be accounted for by internal hydraulic forces (i.e, vane passing frequencies). Trending of vibration data at both minimum flow and full flow will adequately reflect changes in pump conditions.

#### 11,12 CS Pumps

The Code alert limits will not be met based on the higher vibration levels at minimum flow. A second contributing factor is the effect of piping configuration. Trending of vibration data will adequately reflect changes in pump condition.

#### 11, 12 CC Pumps

The component cooling system resistance cannot be adjusted to achieve a standard reference point during a test. Per the Code, flow and pressure readings will be taken and compared to reference values. These reference values will be based on pump performance and history when it was in good mechanical condition. Certain vibration points are sensitive to flow conditions, particularly low flows. Vibration readings will be correlated to pressure/flow readings. The outboard pump bearing is very load sensitive and vibration varies by as much as 100%.

#### 12,22 CL Pumps

Vibration values and limits are flow, speed and sensor location dependent. System resistance cannot be adjusted to achieve a standard reference point. Per the Code, flow and pressure readings will be taken and compared to reference values. These reference values will be based on pump performance and history when it was in good mechanical condition. Vibration readings will be correlated to pressure/flow readings.

### JUSTIFICATION

All pumps have a detailed vibration history which is trended and available to the engineering staff. Operating history and availability of these pumps has been excellent with no failures. The pump manufacturers are in agreement that pump degradation can be monitored by trending vibration levels from a reference point properly established. Alternate acceptance criteria established as described above will give adequate indications of pump degradation.

## 2. REQUEST FOR RELIEF

COMPONENTS	FUNCTION	ASME Code Class	ASME Code Class
11, 12 Component Cooling Pump	Remove heat from components associated with removal of reactor core decay heat under accident conditions.	3	----

### CODE REQUIREMENTS

OMa 1988 Part 6, Section 4.6 requires flow instrumentation be accurate within  $\pm 2\%$ .

### ALTERNATE TESTING

Presently installed instrumentation is accurate to  $\pm 3\%$ . This accuracy is sufficient to allow measurement of flow changes.

### BASIS FOR REQUESTING RELIEF

The addition of a more accurate flowmeter would require a plant modification with little increase in safety.

### JUSTIFICATION

During each surveillance test the pump differential pressure vs. flow is compared to an acceptance curve based on the code. The component cooling water flow indicators have accuracy which is sufficient to measure change in flow and pump degradation.

In addition, the pump acceptance curves will be reduced by 1% of normal flow to account for the higher instrument inaccuracy.



### 3. REQUEST FOR RELIEF

COMPONENT		FUNCTION	ASME Code class	ASME Vlv Cat
MV-32075	Containment Sump B Isolation Valve A1	Open to provide for ECC during recirculation phase, close for Containment Isolation.	2	A
MV-32076	Containment Sump B Isolation Valve A2	Open to provide for ECC during recirculation phase, close for Containment Isolation.	2	A

#### CODE REQUIREMENT

OMa-1988 Part 10, Section 4.1 requires valves with remote position indicators to be observed locally at least once every two years to verify valve operation is accurately indicated.

#### ALTERNATE TESTING

System characteristics and/or visual observation will be used to determine obturator movement. The valves are enclosed by valve enclosures which are part of the containment barrier. It is not considered practical to disassemble these enclosures to verify correct position indication. The valves are leak tested in the closed position each refueling outage and will be visually verified to stroke whenever the cover is removed.

#### BASIS FOR REQUESTING RELIEF

Valve design does not allow for easy access to valves for inspection of position. Removing the valve cover would be a hardship with no equivalent increase in safety.

#### JUSTIFICATION

These valves are full stroked and timed both open and closed each refueling outage. Any change in the position indication system would be reflected in the timing. This stroking plus periodic inspection whenever the cover is removed gives adequate indication that the valve is operable.

#### 4. REQUEST FOR RELIEF

COMPONENT	FUNCTION	ASME CODE CLASS	ASME VLV. CAT.
12, 22 Diesel Driven Cooling Water Pump	Remove heat from components that must function during accident conditions.	3	----
121 Motor Driven Cooling Water Pump	Remove heat from components that must function during accident conditions.	3	----
11, 12 Residual Heat Removal Pump	Deliver cooling water to the reactor core in the event of a loss of coolant accident.	2	----

#### CODE REQUIREMENT

On vertical line shaft pumps, vibration measurements shall be taken on the upper motor bearing housing in three orthogonal directions, one of which is the axial direction.

#### ALTERNATE TESTING

12, 22 Diesel Driven Cooling Water Pumps - Vibration measurements will be taken on the right angle drive in three orthogonal directions, one of which will be axial. In addition, one vibration measurement will be taken on the diesel engine.

121 Motor Driven Cooling Water Pump - Vibration measurement will be taken on the motor housing in three orthogonal directions, one of which is axial. The axial reading will be on the side of the housing, midway between the upper and lower bearing.

11, 12 Residual Heat Removal Pumps - Two existing installed probes which measure vibration in two orthogonal directions will be used.

#### 4. REQUEST FOR RELIEF (CONT'D)

##### BASIS FOR REQUESTING RELIEF

12, 22 Diesel Driven Cooling Water Pumps - The driver for the DDCWP is a diesel engine coupled to a right angle drive. The pump bearing is inaccessible for vibration measurements.

121 Motor Drive Cooling Water Pump - The design of the MDCWP prevents access to the upper thrust bearing housing to take an axial vibration reading with a portable instrument while the pump is running. A modification to add a permanent transducer would be costly with no commensurate additional benefit. To climb on top of the motor while it is running is a personnel hazard.

11, 12 Residual Heat Removal Pumps - The upper motor thrust bearing housing is inaccessible for an axial measurement. Portable instrumentation would be difficult to use due to a domed cover over the pump housing which limits access and would tend to amplify any readings. The addition of a permanent probe would be costly with no commensurate benefit to safety.

##### JUSTIFICATION

12, 22 Diesel Driven Cooling Water Pumps - Pump and driver thrust is transmitted to the right angle drive. Monitoring vibration levels at this point will give an acceptable indication of performance. Vibration acceptance criteria developed from historical and engineering data has been established and will give indication of any pump degradation.

121 Motor Driven Cooling Water Pumps - The readings taken on the pump housing give an acceptable indication of performance. Any axial vibrations will be transmitted to the motor housing and would be indicated on the portable meter.

11, 12 Residual Heat Removal Pumps - The thrust bearing on this pump would transfer a component of the axial vibration to the radial probes.

## 5. REQUEST FOR RELIEF

COMPONENT	FUNCTION	ASME CODE CLASS	ASME VLV CAT
12, 2 Diesel Driven Cooling Water Pump	Remove heat from components that must function during accident conditions.	3	---
121 Motor driven Cooling Water Pump	Remove heat from components that must function during accident conditions.	3	----

### CODE REQUIREMENT

In measuring hydraulic performance where system resistance cannot be varied, flow rate and pressure shall be determined and compared to their respective reference values. Alert range is 0.93 to  $<0.95 \Delta Pr$  and required action range low is  $<0.93 \Delta Pr$  and high is  $> 1.10 \Delta Pr$ .

### ALTERNATE TESTING

Pump flow and pump suction and discharge pressure are recorded. The pump differential pressure is then plotted against flow to determine a "point" on the pump curve. This point is then compared to acceptance criteria. The acceptable range will be between 90% and 103% of the pump curve. The alert ranges will be from 80% to 90% of reference (low value) to 103% to 106% (high value). The required action range will be for values less than 80% or greater than 106% of the pump curve.

Curves will be developed using the following methods:

- A) Curves will be developed when the pumps are known to be operating properly. If the pump is repaired or replaced, the curve will be validated or redrawn.
- B) The reference points used to develop the curve will be measured with instruments that meet code accuracy, and the points will be sufficient in number (minimum of 5). The points used will include points close to design flow.
- C) Acceptance criteria based on curves will not conflict with Technical Specifications or USAR operability criteria for flow rate and differential pressure.

## 5. REQUEST FOR RELIEF (CONT'D)

### BASIS FOR REQUESTING RELIEF

System design does not allow performance of hydraulic tests at specific reference points. Because of the numerous system loading combinations possible, it is not practical to reestablish the exact reference point for the pump test. Because a repeatable reference point cannot be reestablished for each test, the inaccuracies in determining the pumps' hydraulic conditions and code allowable variances in these conditions (flow and dp) compound the allowable ranges of operation when both flow and dp are compared together.

### JUSTIFICATION

The pump curves for acceptance criteria were developed from vendor supplied performance and preoperational test data. A pump that operates within the established curves will meet all design, Technical Specification and accident conditions. Flow/pressure data which falls within the acceptance criteria range described above is a valid indicator of pump operability.

#### 10. REQUEST FOR RELIEF

COMPONENT	FUNCTION	ASME CODE CLASS
11, 12 Containment Spray Pumps	Provide sufficient heat removal capability to maintain the post accident containment pressure below the design pressure.	2

#### CODE REQUIREMENT

A bypass test loop may be used for pump testing, provided the bypass is designed to recognize the pump manufacturers' operating conditions for minimum flow operation. Generic Letter 89-04 requires that a pump that cannot be full flow tested have an instrumented minimum flow line.

#### ALTERNATE TESTING

The containment spray pumps will continue to be tested on a code frequency using the non instrumented minimum flow line.

#### BASIS FOR REQUESTING RELIEF

The installation of a minimum flow line meter requires Unit 1 to be at cold shutdown. The next refueling outage for Unit 1 is scheduled for 1994. The instrumentation will be installed at that time.

#### JUSTIFICATION

The continued use of the non instrumented minimum flow line is acceptable because it provides a standard hydraulic resistance to the pumps during regular testing. Any pump degradation would be noticed by trending differential pressure.

## 2.2 ASME Section XI Pump Testing Program - Unit No. 2 Components

ASME Code Edition and Addenda: 1989 Edition

Program Period: December 21, 1994 to December 21, 2004

The attached sheet identifies the Unit 2 system pumps that are subject to the testing requirements of Section XI, ASME/ANSI OMA-1988 part 6.

### LEGEND

#### Test Frequency

- M = monthly
- Q = quarterly
- C = cold shutdown
- Y = 12 months
- R = Refueling

#### Test Parameter

- Pi = inlet pressure
- Vv = vibration velocity
- Q = flowrate
- Pd = discharge pressure
- N = speed

## ASME CODE PUMPS - Unit 2

PUMP DESCRIPTION	FLOW DIAGRAM	CLASS DWG	TEST PROC	TEST PARAMETER					TEST Freq.	REQUEST FOR RELIEF
				Pi	Vv	Q	Pd	N		
21 Safety Injection	X-H-1001-7	34	SP-2088 SP-2092A	X X	X X	 X	X X		Q R	#1
22 Safety Injection	X-H-1001-7	34	SP-2088 SP-2092A	X X	X X	 X	X X		Q P	#1
22 Turbine Aux Feedwater	NF-39223	16	SP-2102 SP-2103	X X	X X	 X	X X	X X	Q* R	
21 Motor Aux Feedwater	NF-39223	16	SP-2100 SP-2101	X X	X X	 X	X X		Q* R	
21 Containment Spray	NF-39237	19	SP-2090	X	X	X	X		Q	#1
22 Containment Spray	NF-39237	19	SP-2090	X	X	X	X		Q	#1
21 Component* Cooling	NF-39246	39	SP-2155	X	X	X	X		Q	#1, #2
22 Component Cooling	NF-39246	39	SP-2155	X	X	X	X		Q	#1, #2
21 Residual Heat Removal	X-H-1001-8	35	SP-2089	X	X	X	X		Q	#4
22 Residual Heat Removal	X-H-1001-8	35	SP-2089	X	X	X	X		Q	#4

\* Technical Specification requires the Auxiliary Feedwater Pump be started at intervals of one month.



### 2.3 ASME Section XI Valve Testing Program - Unit No. 2 Components

ASME Code Edition and Addenda: 1989 Edition

Program Period: December 16, 1993 to December 16, 2003

#### NOTES:

1. The following sheets identify the Unit 2 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 ASME/ANSI OMa-10, 1988, 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 USAR and to take the reactor to safe shutdown.
- 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 OM-10 except where relief is requested.

#### 2. LEGEND

##### TEST TYPE:

E = exercise  
SP = relief valve  
LT = leak test  
I = inspection  
PV = position verification  
2 y = every other year

##### TEST FREQUENCY:

D = daily  
M = monthly  
Q = quarterly  
R = refueling  
Y = yearly  
AR = as required (See note 4)

CS = Cold shutdown  
S = startup  
CU = core unload  
5y = 5 year  
10y = 10 years

ASME Section XI Valve Testing Program - Unit No. 2 Components (Cont'd)

3. Inservice valve testing at cold shutdown is defined as: Testing is required if not done in the previous 90 days. 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 shut-downs to meet the code specified testing frequency.
4. Containment Inservice Purge Supply and Exhaust Valves are normally blind flange out-of service during operation. In event that valves are required for containment integrity they will be exercised and leak rate tested prior to being placed inservice.
5. For all control and motor valve exercise (stroke timing) tests, the base stroke time from which the Code allowable time increase and decrease is figured will be a time established by one of the following methods:
  - a) Original preoperational testing.
  - b) Post maintenance testing.
  - c) The first running of the test.
6. The column titled "Valve Function" describes the valve function as defined by the ASME Code (active or passive). In addition, for active valves the valve position required for accident mitigation is included. For example, an active valve that is required to open for accident mitigation is listed as "act-open". For an active valve that is required to open and close for accident mitigation is "act-both".

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
2AF-13-1	2AF	12 & 21 AUX FW PUMPS DISCH X - CONN	NF-39223	38	B	ACT-BOTH	SP-1730	E	CS	
2AF-29-1	2AF	21 AUX FD PUMP SUCT RELIEF	NF-39223	38	C	ACT-BOTH	P3120-1-21A	SP	10Y	
2AF-29-2	2AF	22 AUX FD PUMP SUCT RELIEF	NF-39223	38	C	ACT-BOTH	P3120-1-22A	SP	10Y	
AF-14-5	2AF	21 AUX FW PUMP SUCTION CHECK	NF-39223	38	C	ACT-OPEN		E	CS	
AF-14-7	2AF	22 AUX FW PUMP SUCTION CHECK	NF-39223	38	C	ACT-OPEN		E	CS	
AF-15-11	2AF	21 AUX FW PUMP DISCH CHECK	NF-39223	38	C	ACT-BOTH		E	CS	
AF-15-12	2AF	22 AUX FW PUMP DISCH CHECK	NF-39223	38	C	ACT-BOTH		E	CS	
AF-15-5	2AF	AUX FW TO STM GEN 22 CHECK	NF-39223	38	C	ACT-BOTH		E	CS	
AF-15-6	2AF	AUX FW TO STM GEN 22 CHECK	NF-39223	38	C	ACT-BOTH		E	CS	
AF-15-7	2AF	AUX FW TO STM GEN 21 CHECK	NF-39223	38	C	ACT-BOTH		E	CS	
AF-15-8	2AF	AUX FW TO STM GEN 21 CHECK	NF-39223	38	C	ACT-BOTH		E	CS	
AF-16-3	2AF	AUX FW TO 22 STM GEN ISOL CHECK	NF-39223	38	C	ACT-BOTH		E	CS	
AF-16-4	2AF	AUX FW AT 21 STM GEN ISOL CHECK	NF-39223	38	C	ACT-BOTH		E	CS	
AF-28-3	2AF	21 AUX FW PUMP RECIRC LINE CHECK	NF-39223	38	C	ACT-OPEN		E	Q	
AF-28-4	2AF	22 AUX FW PUMP RECIRC LINE CHECK	NF-39223	38	C	ACT-OPEN		E	Q	
CV31418	2AF	21 TD AFWP RECIRC/LUBE OIL CLG CV	NF-39223	38	B	ACT-OPEN	SP-2100	E	Q	
CV31419	2AF	22 MD AFWP RECIRC/LUBE OIL CLG CV	NF-39223	38	B	ACT-OPEN	SP-2102	E	Q	
MV32246	2AF	AUX FW TO #21 STM GEN	NF-39223	38	B	ACT-BOTH	SP-2102	E	Q	
MV32247	2AF	AUX FW TO #22 STM GEN	NF-39223	38	B	ACT-BOTH	SP-2102	E	Q	
MV32248	2AF	AUX FW TO 21 STM GEN ISOL MV	NF-39223	38	B	PAS-OPEN		PV	2Y	
MV32249	2AF	AUX FW TO 22 STM GEN ISOL MV	NF-39223	38	B	PAS-OPEN		PV	2Y	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
MV32336	2AF	21 AUX FW PUMP SUCTION	NF-39223	38	B	ACT-BOTH	SP-2100	E	Q	
MV32345	2AF	22 AUX FW PUMP SUCTION	NF-39223	38	B	ACT-BOTH	SP-2102	E	Q	
MV32383	2AF	AUX FW TO 21 STM GEN	NF-39223	38	B	ACT-BOTH	SP-2100	E	Q	
MV32384	2AF	AUX FW TO 22 STM GEN	NF-39223	38	B	ACT-BOTH	SP-2100	E	Q	
2CA-11-1	2CA	CAUSTIC ADDITON TO #21 & #22 CS PUMPS CHK	NF-39252	18	C	ACT-BOTH		E	R	
CV31939	2CA	22 CS SUCT PUMP FROM NaOH STDPIPE ISOL	NF-39252	18	B	ACT-OPEN	SP-2090	E	Q	
CV31940	2CA	21 CS PUMP SUCT FROM NaOH STDPIPE ISOL	NF-39252	18	B	ACT-OPEN	SP-2090	E	Q	
2CC-14-5	2CC	21 RCP BRG CLG WTR RETURN CHK	NF-39246-1	39	C	ACT-BOTH		E	CS	
2CC-14-6	2CC	22 RCP BRG CLG WTR RETURN CHK	NF-39246-1	39	C	ACT-BOTH		E	CS	
2CC-18-1	2CC	22 REACT CLNT PUMP BRG CLG WTR RET CHK	NF-39246-1	39	C	ACT-BOTH		E	CS	
2CC-18-2	2CC	21 REACT CLNT PUMP BRG CLG WTR RET CHK	NF-39246-1	39	C	ACT-BOTH		E	CS	
2CC-23-1	2CC	21 EXCESS LETDOWN HT EXCH INLET CHK	NF-39246-1	39	C	ACT-CLOSE		E	CS	
2CC-24-1	2CC	21 EXCESS LTDN OUTLT CHECK	NF-39246-1	39	C	ACT-CLOSE		E	CS	
2CC-3-1	2CC	21 COMP COOLING PUMP DISCH CHK	NF-39246-1	39	C	ACT-OPEN	SP-2155	E	Q	
2CC-3-2	2CC	22 COMP COOLING PUMP DISCH CHK	NF-39246-1	39	C	ACT-OPEN	SP-2155	E	Q	
2CC-3-3	2CC	RET LINE TO #21 COMP COOLING PUMP CHK	NF-39246-1	39	C	ACT-BOTH		E	CS	
2CC-3-4	2CC	RET LINE TO #22 COMP COOLING PUMP CHK	NF-39246-1	39	C	ACT-BOTH		E	CS	
2CC-5-1	2CC	RET LINE TO #21 COMP COOLING PUMP CHECK	NF-39246-1	39	C	ACT-BOTH		E	CS	
2CC-5-2	2CC	RET LINE TO #22 COMP COOLING PUMP CHECK	NF-39246-1	39	C	ACT-BOTH		E	CS	
2CC-61-1	2CC	EMG SUPPLY TO 21 & 22 RC PUMPS BRG CLG CHK	NF-39246-1	39	C	ACT-BOTH		E	CS	
2CC-61-2	2CC	EMG SUPPLY TO 21 & 22 RC PUMPS BRG CLG CHK	NF-39246-1	39	C	ACT-BOTH		E	CS	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
2CC-73-1	2CC	21 RCP BRG WTR SUPPLY CHK	NF-39246-1	39	C	ACT-OPEN		E	Q	
2CC-73-2	2CC	22 RCP BRG WTR SUPPLY CHK	NF-39246-1	39	C	ACT-OPEN		E	Q	
CV31253	2CC	21 EXCS LTDWN HT EXCH OUTLET	NF-39246-1	39	B	ACT-CLOSE		E	Q	
MV32122	2CC	COMP COOLING WTR SUPPLY HEADER	NF-39246-1	39	B	ACT-CLOSE	SP-2163	E	R	
MV32123	2CC	COMP COOLING WTR SUPPLY HEADER	NF-39246-1	39	B	ACT-CLOSE	SP-2163	E	R	
MV32124	2CC	21 REACT CLNT PUMP BRG CLG WTR SUPPLY	NF-39246-1	39	B	PAS-OPEN		PV	2Y	
MV32125	2CC	21 REACT CLNT PUMP BRG CLG WTR RETURN	NF-39246-1	39	B	PAS-OPEN		PV	2Y	
MV32126	2CC	22 REACT CLNT PUMP BRG CLG WTR SUPPLY	NF-39246-1	39	B	PAS-OPEN		PV	2Y	
MV32127	2CC	22 REACT CLNT PUMP BRG CLG WTR RETURN	NF-39246-1	39	B	PAS-OPEN		PV	2Y	
MV32128	2CC	21 RSDL HT EXGR COMP CLNT INLT MV	NF-39246-1	39	B	ACT-BOTH	SP-2155	E	Q	
MV32129	2CC	22 RSDL HT EXGR COMP CLNT INLT MV	NF-39246-1	39	B	ACT-BOTH	SP-2155	E	Q	
MV32130	2CC	21 EXCESS LETDOWN HT EXCH SUPPLY	NF-39246-1	39	B	ACT-CLOSE		E	Q	
MV32211	2CC	21 COMP CLG PMP SUCT MV	NF-39246-1	39	B	ACT-BOTH	SP-2155	E	Q	
MV32212	2CC	22 COMP CLG PMP SUCT MV	NF-39246-1	39	B	ACT-BOTH	SP-2155	E	Q	
MV32268	2CC	21/22 RCP COMP CLG INLT ISOL MV B	NF-39246-1	39	B	ACT-BOTH	SP-2163	E	R	
MV32269	2CC	21/22 RCP COMP CLG INLT ISOL MV A	NF-39246-1	39	B	ACT-BOTH	SP-2163	E	R	
2CL-12-1	2CL	21 CONTAINMENT FAN COILS-SUPPLY	NF-39217-3	36	C	ACT-OPEN		E	Q	
2CL-12-2	2CL	23 CONTAINMENT FAN COILS-SUPPLY	NF-39217-3	36	C	ACT-OPEN		E	Q	
2CL-12-3	2CL	22 CONTAINMENT FAN COILS-SUPPLY	NF-39217-3	36	C	ACT-OPEN		E	Q	
2CL-12-4	2CL	24 CONTAINMENT FAN COILS-SUPPLY	NF-39217-3	36	C	ACT-OPEN		E	Q	
2CL-43-1	2CL	21 CLG WTR PUMP DISCH	NF-39216	36	C	ACT-CLOSE	SP-1106B	E	Q	

## ASME SECTION XI VALVES UNIT 2

<i>Valve Number</i>	<i>Sys</i>	<i>Description</i>	<i>P&amp;ID</i>	<i>Code Dwg</i>	<i>Vlv Category</i>	<i>Vlv Function</i>	<i>Test Proc</i>	<i>Test Type</i>	<i>Test Freq</i>	<i>Relief Request</i>
2CL-43-2	2CL	22 CLG WTR PUMP DISCH	NF-39216	36	C	ACT-BOTH	SP-1106B	E	Q	
CV31383	2CL	21 CC HEAT EXCH CL OUTLET TCV	NF-39217	36	B	ACT-OPEN		E	CS	
CV31384	2CL	22 CC HEAT EXCH CL OUTLET TCV	NF-39217	36	B	ACT-OPEN		E	CS	
CV31457	2CL	22 DD CLWP DSL JCKT CLG OUTLT	NF-39217	36	B	ACT-OPEN	SP-1106B	E	Q	
CV39200	2CL	21/23 FCU CLG WATER RTN ORIFICE B-P VLV	NF-39217	36	B	ACT-OPEN	SP-2158	E	Q	
CV39202	2CL	22/24 FCU CLG WATER RTN ORIFICE B-P VLV	NF-39217	36	B	ACT-OPEN	SP-2158	E	Q	
MV32026	2CL	21 MD AFW PUMP SUCT CLG WTR SUPPLY MV	NF-39216	36	B	ACT-OPEN	SP-2193	E	CS	
MV32030	2CL	22 TD AFW PUMP SUCT CLG WTR SUPPLY MV	NF-39216	36	B	ACT-OPEN	SP-2193	E	CS	
MV32033	2CL	2 TURB BLDG CLG WTR HDR MV	NF-39217-1	36	B	ACT-CLOSE	SP-1110	E	Q	
MV32034	2CL	COOLING WTR PUMPS-CROSS-OVER	NF-39216	36	B	ACT-CLOSE	SP-2158	E	Q	
MV32035	2CL	COOLING WTR PUMPS-CROSS-OVER	NF-39216	36	B	ACT-CLOSE	SP-2158	E	Q	
MV32147	2CL	21 CONTAINMENT FAN COIL OUTLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32148	2CL	21 CONTAINMENT FAN COIL OUTLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32150	2CL	22 CONTAINMENT FAN COIL OUTLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32151	2CL	22 CONTAINMENT FAN COIL OUTLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32153	2CL	23 CONTAINMENT FAN COIL OUTLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32154	2CL	23 CONTAINMENT FAN COIL OUTLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32156	2CL	24 CONTAINMENT FAN COIL OUTLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32157	2CL	24 CONTAINMENT FAN COIL OUTLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32159	2CL	LOOP A/B CLG WTR HDR XOVR MV B	NF-39217	36	B	ACT-CLOSE	SP-2158	E	Q	
MV32160	2CL	21 COMP CLG HT EXGR CLG WTR MV	NF-39217	36	B	ACT-OPEN	SP-2155	E	Q	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
MV32161	2CL	22 COMP CLG HT EXGR CLG WTR MV	NF-39217	36	B	ACT-OPEN	SP-2155	E	Q	
MV32329	2CL	24 " CLG WTR RETURN UNIT 2	NF-39217	36	B	ACT-OPEN	SP-1158	E	Q	
MV32334	2CL	24 " CLG WTR RETURN UNIT 2	NF-39217	36	B	PAS-OPEN		PV	2Y	
MV32386	2CL	21 CCNTAINMENT FAN COIL INLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32387	2CL	22 CONTAINMENT FAN COIL INLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32388	2CL	23 CONTAINMENT FAN COIL INLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
MV32389	2CL	24 CONTAINMENT FAN COIL INLET	NF-39217	36	B	ACT-BOTH	SP-2158	E	Q	
CV-31383	2CL	21 CC HEAT EXCHANGER CL OUT TCV	NF-39217	36	B	ACT-OPEN		E	CS	
CV-31384	2CL	22 CC HEAT EXCHANGER CL OUT TCV	NF-39217	36	B	ACT-OPEN		E	CS	
2CS-22-1	2CS	21 CONT SPRAY PUMP SUCT RELIEF	NF-39237	19	C	ACT-BOTH	P3120-14-21A	SP	10Y	
2CS-22-2	2CS	22 CONT SPRAY PUMP SUCT RELIEF	NF-39237	19	C	ACT-BOTH	P3120-14-22A	SP	10Y	
CS-46	2CS	22 CONT SPRAY PUMP SUCT CHK	NF-39237	19	C	ACT-BOTH		E	R	
CS-47	2CS	21 CONT SPRAY PUMP SUCT CHK	NF-39237	19	C	ACT-BOTH		E	R	
CS-48	2CS	22 CONT SPRAY PUMP DISCH CHK VLV	NF-39237	19	A, C	ACT-BOTH		E	R	
							SP-2072.29B	LT	R	
CS-49	2CS	21 CONT SPRAY PUMP DISCH CHK VLV	NF-39237	19	A,C	ACT-BOTH		E	R	
							SP-2072.29A	LT	R	
MV32108	2CS	21 CONT SPRAY PUMP SUCT	NF-39237	19	B	ACT-OPEN	SP-2137	E	R	
MV32109	2CS	22 CONT SPRAY PUMP SUCT	NF-39237	19	B	ACT-OPEN	SP-2137	E	R	
MV32110	2CS	21 CONT SPRAY PUMP SUCT	NF-39237	19	B	ACT-BOTH	SP-2137	E	R	
MV32111	2CS	22 CONT SPRAY PUMP SUCT	NF-39237	19	B	ACT-BOTH	SP-2137	E	R	



## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
MV32114	2CS	21 CONT SPRAY PUMP DISCH	NF-39237	19	A	ACT-OPEN	SP-2241/2137	E	CS	
							SP-2072.29B	LT	R	
MV32116	2CS	22 CONT SPRAY PUMP DISCH	NF-39237	19	A	ACT-OPEN	SP-2241/2137	E	CS	
							SP-2072.29A	LT	R	
2FW-8-1	2FW	FEEDWATER PUMP DISCH-AT STM GEN 21 CHK	NF-39223	38	C	ACT-CLOSE		E	CS	
2FW-8-2	2FW	FEEDWATER PUMP DISCH AT STM GEN 22 CHK	NF-39223	38	C	ACT-CLOSE		E	CS	
MV32028	2FW	FW TO 21 STEAM GENERATOR	NF-39223	38	B	ACT-CLOSE		E	CS	
MV32029	2FW	FW TO 22 STEAM GENERATOR	NF-39223	38	B	ACT-CLOSE		E	CS	
2HC-1-3	2HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	B	ACT-OPEN	SP-2157	E	CS	
2HC-1-4	2HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	B	ACT-OPEN	SP-2157	E	CS	
2HC-1-5	2HC	EMERGENCY AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	B	ACT-OPEN	SP-2157	E	CS	
2HC-1-6	2HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	B	ACT-OPEN	SP-2157	E	CS	
2HC-2-1	2HC	INST & EMERG AIR TO INSIDE CNTMT VESSEL CK	NF-39251	25	A, C	ACT-BOTH		E	CS	
							SP-2072.50	LT	R	
2HC-2-2	2HC	INST & EMERG AIR TO INSIDE CNTMT VESSEL CK	NF-39251	25	A, C	ACT-BOTH		E	CS	
							SP-2072.42A	LT	R	
CV31924	2HC	POST LOCA TO FI ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-2072.50	LT	R	
CV31926	2HC	POST LOCA TO GA ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-2072.50	LT	R	
CV31928	2HC	POST LOCA TO GA ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	



## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
							SP-2072.42A	LT	R	
CV31930	2HC	POST LOCA TO FI ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-2072.42A	LT	R	
MV32290	2HC	POST LOCA VENT ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-2072.50	LT	R	
MV32292	2HC	POST LOCA VENT ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-2072.42A	LT	R	
MV32293	2HC	POST LOCA SUPPLY ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-2072.50	LT	R	
MV32295	2HC	POST LOCA SUPPLY ISOL	NF-39251	25	A	ACT-BOTH	SP-1252	E	Q	
							SP-2072.42A	LT	R	
2MS-15-1	2MS	FROM 22 STM GEN 22 AUX FDWTR PUMP CHK	NF-39219	37	C	ACT-BOTH		E	CS	
2MS-15-2	2MS	FROM 21 STM GEN 22 AUX FDWTR PUMP CHK	NF-39219	37	C	ACT-BOTH		E	CS	
RS-19-3	2MS	STM GEN 21 OUTLET STOP - CHECK	NF-39219	37	C	ACT-CLOSE		E	CS	
RS-19-4	2MS	STM GEN 22 OUTLET STOP - CHECK	NF-39219	37	C	ACT-CLOSE		E	CS	
RS-21-11	2MS	21 STM RELIEF HDR	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	
RS-21-12	2MS	21 STM RELIEF HDR	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	
RS-21-13	2MS	21 STM RELIEF HDR	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	
RS-21-14	2MS	21 STM RELIEF HDR	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	
RS-21-15	2MS	21 STM RELIEF HDR	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	
RS-21-16	2MS	22 STM RELIEF HDR	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	

## ASME SECTION XI VALVES UNIT 2

<i>Valve Number</i>	<i>Sys</i>	<i>Description</i>	<i>P&amp;ID</i>	<i>Code Dwg</i>	<i>Vlv Category</i>	<i>Vlv Function</i>	<i>Test Proc</i>	<i>Test Type</i>	<i>Test Freq</i>	<i>Relief Request</i>
RS-21-17	2MS	22 STM RELIEF HDR	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	
RS-21-18	2MS	22 STM RELIEF HDR	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	
RS-21-19	2MS	22 STM RELIEF HDR	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	
RS-21-20	2MS	22 STM RELIEF HDR STM GEN 22	NF-39219	37	C	ACT-BOTH	P3120-52-2	SP	10Y	
CV31116	2MS	21 LOOP A MN STM HDR ISOL	NF-39219	37	B	ACT-CLOSE	SP-2099	E	CS	
CV31117	2MS	22 LOOP B MN STM HDR ISOL	NF-39219	37	B	ACT-CLOSE	SP-2099	E	CS	
CV31999	2MS	21 TD AFWP MN STM SUPPLY	NF-39219	37	B	ACT-OPEN	SP-2102	E	Q	
MV32019	2MS	LOOP A MN STM TO 22 TD AFWP MV	NF-39219	37	B	PAS-OPEN		PV	2Y	
MV32020	2MS	LOOP B MN STM TO 22 TD AFWP MV	NF-39219	37	B	PAS-OPEN		PV	2Y	
MV32048	2MS	2 LOOP A MN STM HDR EQLZG MV	NF-39219	37	B	PAS-CLOSE		PV	2Y	
MV32050	2MS	2 LOOP B MN STM HDR EQLZG MV	NF-39219	37	B	PAS-CLOSE		PV	2Y	
RUPT DISC	2MS	AF EXH	NF-39219	37	D	PASSIVE		SP	5Y	
2RC-10-1	2RC	PRESSURIZER RELIEF VALVE	HIAW 1001-3	30	C	ACT-BOTH	P3120-57-2A	SP	5Y	
2RC-10-2	2RC	PRESSURIZER RELIEF VALVE	HIAW 1001-3	30	C	ACT-BOTH	P3120-57-2B	SP	5Y	
2RC-3-1	2RC	REACTOR MAKE UP WTR TO PRZR RELIEF TANK	HIAW 1001-3	30	A, C	ACT-CLOSE		E	CS	
							SP-2072.45	LT	R	
2RC-5-1	2RC	NITROGEN SUPPLY LINE TO PRZR RELIEF TNK	HIAW 1001-3	30	A, C	ACT-CLOSE		E	CS	
							SP-2072.45	LT	R	
CV31209	2RC	PRT N2 SUPPLY ISOL	HIAW 1001-3	30	A	ACT-CLOSE	SP-2272	E	Q	
							SP-2072.2	LT	R	
CV31233	2RC	PRESSURIZER OUTLET TO PRZR RLF TNK A	HIAW 1001-3	30	B	ACT-BOTH	SP-2291	E	CS	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31234	2RC	PRESSURIZER OUTLET TO PRZR RLF TNK B	HIAW 1001-3	30	B	ACT-BOTH	SP-2291	E	CS	
CV31342	2RC	RTR MAJ WATER TO PRT ISOL	HIAW 1001-3	30	A	ACT-CLOSE	SP-2272	E	Q	
							SP-2072.45	LT	R	
CV31344	2RC	PRT SAMPLE TO GA	HIAW 1001-3	30	A	ACT-CLOSE	SP-2246	E	Q	
							SP-2072.1	LT	R	
CV31345	2RC	PRT SAMPLE TO GA	HIAW 1001-3	30	A	ACT-CLOSE	SP-2246	E	Q	
							SP-2072.1	LT	R	
MV32197	2RC	PRESSURIZER OUTLET TO PRZR RLF TNK A	HIAW 1001-3	30	B	ACT-BOTH	SP-2265	E	Q	
MV32198	2RC	PRESSURIZER OUTLET TO PRZR RLF TNK B	HIAW 1001-3	30	B	ACT-BOTH	SP-2265	E	Q	
SV37091	2RC	PRESSURIZER VENT VALVE A	HIAW 1001-3	30	B	ACT-BOTH	SP-2248	E	R	
SV37092	2RC	PRESSURIZER VENT VALVE B	HIAW 1001-3	30	B	ACT-BOTH	SP-2248	E	R	
SV37093	2RC	RTR HEAD VENT VALVE A	HIAW 1001-3	30	B	ACT-BOTH	SP-2248	E	R	
SV37094	2RC	RTR HEAD VENT VALVE B	HIAW 1001-3	30	B	ACT-BOTH	SP-2248	E	R	
SV37095	2RC	VENT TO PRT VALVE A	HIAW 1001-3	30	B	ACT-BOTH	SP-2248	E	R	
SV37096	2RC	VENT TO CNTMT ATMOSPHERE	HIAW 1001-3	30	B	ACT-BOTH	SP-2248	E	R	
CV31129	2RD	RAD MON 2R-11 & 2R-12 SMPL RTN	NF-39790-4	N/A	A	ACT-CLOSE	SP-2244	E	Q	
							SP-2072.22	LT	R	
CV31642	2RD	RAD MON 2R-11 & 2R-12 SMPL RTN	NF-39790-4	N/A	A	ACT-CLOSE	SP-2244	E	Q	
							SP-2072.22	LT	R	
CV31643	2RD	RAD MON 2R-11 & 2R-12 SMPL INLET	NF-39790-4	N/A	A	ACT-CLOSE	SP-2244	E	Q	
							SP-2072.23	LT	R	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31644	2RD	RAD MON 2R-11 & 2R-12 SMPL INLET	NF-39790-4	N/A	A	ACT-CLOSE	SP-2244	E	Q	
							SP-2072.23	LT	R	
2RH-3-1	2RH	RHR PUMP 22 SUCT LINE CHK	HIAW 1001-8	35	C	ACT-CLOSE		E	R	
2RH-3-2	2RH	RHR PUMP 21 SUCT LINE CHK	HIAW 1001-8	35	C	ACT-CLOSE		E	R	
2RH-3-3	2RH	RHR PUMP 22 DISCHARGE LINE CHK	HIAW 1001-8	35	C	ACT-OPEN		E	CS	
2RH-3-4	2RH	RHR PUMP 21 DISCH LINE CHK	HIAW 1001-8	35	C	ACT-OPEN		E	CS	
2RH-6-1	2RH	2 INCH-LETDOWN LINE BY-PASS	HIAW 1001-8	35	C	ACT-OPEN		E	CS	
2RH-8-1	2RH	RHR PUMP #21 & #22 SUCTION	HIAW 1001-8	35	C	ACT-BOTH	P3120-59-2A	SP	10Y	
CV31238	2RH	RH EXCH #21 OUTLET	HIAW 1001-8	35	B	PAS-OPEN		PV	2Y	
CV31239	2RH	RH EXCH #22 OUTLET	HIAW 1001-8	35	B	PAS-OPEN		PV	2Y	
MV32169	2RH	DOWNSTREAM OF CV31238	HIAW 1001-8	35	A	PAS-CLOSE	SP-2273	PV	2Y	
							SP-2070	LT	R	
MV32192	2RH	2 REAC LOOP A RSDL HT RMVL ISOL MV A	HIAW 1001-8	35	A	PAS-CLOSE	SP-2273	PV	2Y	
							SP-2070	LT	R	
MV32193	2RH	2 REAC LOOP A RSDL HT RMVL ISOL MV B	HIAW 1001-8	35	A	PAS-CLOSE	SP-2273	PV	2Y	
							SP-2070	LT	R	
MV32232	2RH	2 REAC LOOP B RSDL HT RMVL ISOL MV A	HIAW 1001-8	35	A	PAS-CLOSE	SP-2273	PV	2Y	
							SP-2070	LT	R	
MV32233	2RH	2 REAC LOOP B RSDL HT RMVL ISOL MV B	HIAW 1001-8	35	A	PAS-CLOSE	SP-2273	PV	2Y	
							SP-2070	LT	R	
CV31742	2SA	2 CNTMT INST AIR ISOL VLV A	NF-39244	N/A	A	ACT-CLOSE	SP-2072.20	E	R	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
							SP-2072.20	LT	R	
CV31743	2SA	2 CNTMT INST AIR ISOL VLV B	NF-39244	40	A	ACT-CLOSE	SP-2072.20	E	R	
							SP-2072.20	LT	R	
MV32046	2SB	21 SGB ISOL MV	NF-39250	40	B	ACT-CLOSE	SP-2267	E	Q	
MV32049	2SB	22 SGB ISOL MV	NF-39250	40	B	ACT-CLOSE	SP-2267	E	Q	
MV32051	2SB	21 SGB ISOL MV	NF-39250	40	B	ACT-CLOSE	SP-2267	E	Q	
MV32059	2SB	22 SGB ISOL MV	NF-39250	40	B	ACT-CLOSE	SP-2267	E	Q	
2SI-10-1	2SI	SAFETY INJECTION PUMP #21 DISCH CHK	HIAW 1001-7	34	C	ACT-OPEN	SP-2092A	E	R	
						ACT-CLOSE	SP-2070	E	R	
2SI-10-2	2SI	SAFETY INJECTION PUMP #22 DISCH CHK	HIAW 1001-7	34	C	ACT-OPEN	SP-2092A	E	R	
						ACT-CLOSE	SP-2070	E	R	
2SI-16-1	2SI	FROM S I PUMP DISCH TO TEST LINE CHK	HIAW 1001-7	34	C	ACT-OPEN	SP-2088	E	Q	
2SI-16-2	2SI	FROM S I PUMP DISCH TO TEST LINE CHK	HIAW 1001-7	34	C	ACT-OPEN	SP-2088	E	Q	
2SI-16-3	2SI	REF WTR STG TANK OUTLET TO S I PUMP SUCT	HIAW 1001-7	34	C	ACT-OPEN	SP-2088	E	Q	
2SI-16-4	2SI	COLD LEG INJ LINE TO LOOP B COLD LEG CHK	HIAW 1001-6	33	C	ACT-OPEN	SP-2092A	E	R	
						ACT-CLOSE	SP-2070	E	R	
2SI-16-5	2SI	REACTOR VESSEL INJ LINE TO REAC VESSEL CHK	HIAW 1001-6	33	C	ACT-OPEN	SP-2092A	E	R	
						ACT-CLOSE	SP-2070	E	R	
2SI-16-6	2SI	COLD LEG INJ LINE TO LOOP A COLD LEG CHK	HIAW 1001-6	33	C	ACT-OPEN	SP-2092A	E	R	
						ACT-CLOSE	SP-2070	E	R	
2SI-16-7	2SI	REACTOR VESSEL INJ LINE TO REAC VESSEL CHK	HIAW 1001-6	33	C	ACT-OPEN	SP-2092A	E	R	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
						ACT-CLOSE	SP-2070	E	R	
2SI-25-1	2SI	ACCUMULATOR 21 RELIEF	HIAW 1001-6	33	C	ACT-BOTH	P3120-69-21B	SP	10Y	
2SI-25-2	2SI	ACCUMULATOR 22 RELIEF	HIAW 1001-6	33	C	ACT-BOTH	P3120-69-22B	SP	10Y	
2SI-26-1	2SI	LO HEAD SI TO RX VSL RELIEF	HIAW 1001-6	33	C	ACT-BOTH	P3120-69-2A	SP	10Y	
2SI-4-1	2SI	21 SI PUMP SUCT LINE RELIEF	HIAW 1001-7	34	C	ACT-BOTH	P3120-69-21A	SP	10Y	
2SI-4-2	2SI	22 SI PUMP SUCT LINE RELIEF	HIAW 1001-7	34	C	ACT-BOTH	P3120-69-22A	SP	10Y	
2SI-6-1	2SI	ACC 12 IN OUTLET TO LOOP B COLD LEG	HIAW 1001-6	33	A, C	ACT-OPEN	SP-2092C	E	R	
						ACT-CLOSE	SP-2070	LT	R	
2SI-6-2	2SI	DOWNSTREAM OF CHECK VAL 2SI-6-1	HIAW 1001-6	33	A, C	ACT-OPEN	SP-2092C	E	R	
						ACT-CLOSE	SP-2269	LT	R	
2SI-6-3	2SI	ACC 12 IN OUTLET TO LOOP A COLD LEG	HIAW 1001-6	33	A, C	ACT-OPEN	SP-2092C	E	R	
						ACT-CLOSE	SP-2070	LT	R	
2SI-6-4	2SI	DOWNSTREAM OF CHECK VAL 2SI-6-3	HIAW 1001-6	33	A, C	ACT-OPEN	SP-2092C	E	R	
						ACT-CLOSE	SP-2269	LT	R	
2SI-7-1	2SI	FR RWST TO RHR PUMP SUCT	HIAW 1001-7	34	C	ACT-OPEN	SP-2092B	E	R	
						ACT-CLOSE		E	R	
2SI-7-2	2SI	FR RWST TO RHR PUMP SUCT	HIAW 1001-7	34	C	ACT-OPEN	SP-2092B	E	R	
						ACT-CLOSE		E	R	
2SI-8-1	2SI	FROM BORIC ACID TNKS TO SAFETY INJ PUMPS	HIAW 1001-7	34	B	PAS-OPEN		PV	2Y	
2SI-8-2	2SI	FROM BORIC ACID TNKS TO SAFETY INJ PUMPS	HIAW 1001-7	34	B	PAS-CLOSE		PV	2Y	
2SI-9-1	2SI	COLD LEG INJECTION LINE TO LOOP B COLD LEG	HIAW 1001-6	33	C	ACT-OPEN	SP-2092A	E	R	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
						ACT-CLOSE	SP-2070	E	R	
2SI-9-2	2SI	COLD LEG INJECTION LINE TO LOOP A COLD LEG	HIAW 1001-6	33	C	ACT-OPEN	SP-2092A	E	R	
						ACT-CLOSE	SP-2070	E	R	
2SI-9-3	2SI	FROM RESIDUAL HT EXCH TO REACTOR VESSEL	HIAW 1001-6	33	A, C	ACT-OPEN	SP-2092D	E	R	
						ACT-CLOSE	SP-2070	LT	R	
2SI-9-4	2SI	FROM RESIDUAL HT EXCH TO REACTOR VESSEL	HIAW 1001-6	33	A, C	ACT-OPEN	SP-2092D	E	R	
						ACT-CLOSE	SP-2070	LT	R	
2SI-9-5	2SI	FROM R H EXCH TO REACTOR VESSEL	HIAW 1001-6	33	A, C	ACT-OPEN	SP-2092D	E	R	
						ACT-CLOSE	SP-2070	LT	R	
2SI-9-6	2SI	FROM R H EXCH TO REACTOR VESSEL	HIAW 1001-6	33	A, C	ACT-OPEN	SP-2092D	E	R	
						ACT-CLOSE	SP-2070	LT	R	
CV31244	2SI	N2 SUPPLY TO ACC HCV	HIAW 1001-6	33	A	PAS-CLOSE		PV	2Y	
							SP-2072.31	LT	R	
CV31459	2SI	ACC AFTER CK TEST VLV	HIAW 1001-6	33	B	PAS-CLOSE		PV	2Y	
CV31461	2SI	ACC AFTER CK TEST VLV	HIAW 1001-6	33	B	PAS-CLOSE		PV	2Y	
CV31511	2SI	N2 SUPPLY TO 21 ACC ISOL	HIAW 1001-6	33	A	ACT-CLOSE		E	CS	
							SP-2072.31	LT	R	
CV31512	2SI	N2 SUPPLY TO 22 ACC ISOL	HIAW 1001-6	33	A	ACT-CLOSE		E	CS	
							SP-2072.31	LT	R	
CV31554	2SI	N2 SUPPLY TO ACC CONTMNT ISOL	HIAW 1001-6	33	A	ACT-CLOSE		E	Q	
							SP-2072.31	LT	R	



## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31555	2SI	ACC TO RC DRAIN TNK	HIAW 1001-6	33	B	ACT-CLOSE		E	CS	
CV31556	2SI	ACC TO RC DRAIN TNK	HIAW 1001-6	33	B	ACT-CLOSE		E	CS	
MV32167	2SI	FR RH EXCH TO REACTOR VESSEL	HIAW 1001-6	33	B	PAS-OPEN		PV	2Y	
MV32168	2SI	FR RH EXCH TO REACTOR VESSEL	HIAW 1001-6	33	B	PAS-OPEN		PV	2Y	
MV32170	2SI	2 SAF INJ REAC VSL INJ ISOL MV B	HIAW 1001-6	33	B	ACT-OPEN	SP-2236	E	CS	
MV32171	2SI	2 SAF INJ LOOP B COLD LEG ISOL MV	HIAW 1001-6	33	B	PAS-OPEN		PV	2Y	
MV32172	2SI	2 SAF INJ REAC VSL INJ ISOL MV A	HIAW 1001-6	33	B	ACT-OPEN	SP-2236	E	CS	
MV32173	2SI	2 SAF INJ LOOP A COLD LEG ISOL MV	HIAW 1001-6	33	B	PAS-OPEN		PV	2Y	
MV32174	2SI	ACCUMULATOR 21 12 INCH OUTLET	HIAW 1001-6	33	B	PAS-OPEN		PV	2Y	
MV32175	2SI	ACCUMULATOR 22 12 INCH OUTLET	HIAW 1001-6	33	B	PAS-OPEN		PV	2Y	
MV32176	2SI	2 SAF INJ COLD LEG INJ ISOL MV	HIAW 1001-6	33	B	PAS-OPEN		PV	2Y	
MV32177	2SI	2 SAF INJ REAC VSL INJ ISOL MV	HIAW 1001-6	33	B	PAS-OPEN		PV	2Y	
MV32178	2SI	21 CONTM SMP B ISOL MV A1	HIAW 1001-6	33	A	ACT-BOTH	SP-2137	E	R	#3
							SP-2072.30A	LT	R	
MV32179	2SI	21 CONTM SMP B ISOL MV A2	HIAW 1001-6	33	A	ACT-BOTH	SP-2137	E	R	#3
							SP-2072.30B	LT	R	
MV32180	2SI	21 CONTM SMP B ISOL MV B1	HIAW 1001-6	33	B	ACT-BOTH	SP-2137	E	R	
MV32181	2SI	21 CONTM SMP B ISOL MV B2	HIAW 1001-6	33	B	ACT-BOTH	SP-2137	E	R	
MV32182	2SI	REF WTR STR TNK OUTLET	HIAW 1001-7	34	B	ACT-OPEN	SP-2088	E	Q	
MV32183	2SI	REF WTR STR TNK OUTLET	HIAW 1001-7	34	B	ACT-OPEN	SP-2088	E	Q	
MV32184	2SI	BAST TO 21 & 22 SI PUMP SUCTION MV A	HIAW 1001-7	34	B	ACT-BOTH	SP-2088	E	Q	



## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
MV32185	2SI	BAST TO 21 & 22 SI PUMP SUCTION MV B	HIAW 1001-7	34	B	ACT-BOTH	SP-2088	E	Q	
MV32186	2SI	BAST TO 21 & 22 SI PUMP SUCTION MV C	HIAW 1001-7	34	B	PAS-OPEN		PV	2Y	
MV32187	2SI	RFLG WTR TO 21 RSDL HT RMVL PMP ISOL MV	HIAW 1001-7	34	B	PAS-OPEN		PV	2Y	
MV32188	2SI	RFLG WTR TO 22 RSDL HT RMVL PMP ISOL MV	HIAW 1001-7	34	B	PAS-OPEN		PV	2Y	
MV32190	2SI	SI PUMP #21 SUCTION LINE	HIAW 1001-7	34	B	ACT-BOTH	SP-2236	E	CS	
MV32191	2SI	SI PUMP #22 SUCTION LINE	HIAW 1001-7	34	B	ACT-BOTH	SP-2236	E	CS	
MV32204	2SI	SAF INJ TEST TO 21 RFLG WTR STOR TNK MV A	HIAW 1001-7	34	B	ACT-BOTH	SP-2236	E	CS	
MV32205	2SI	SAF INJ TEST TO 21 RFLG WTR STOR TNK MV B	HIAW 1001-7	34	B	ACT-BOTH	SP-2236	E	CS	
MV32208	2SI	FR RH EXCH TO SI PUMP 21 SUCT	HIAW 1001-7	34	B	ACT-OPEN	SP-2137	E	R	
MV32209	2SI	FR RH EXCH TO SI PUMP 22 SUCT	HIAW 1001-7	34	B	ACT-OPEN	SP-2137	E	R	
CV31412	2SS	2A SGB SAMPLE # SM-235 (OUTSIDE CNTMT)	NF-39238	20	B	ACT-CLOSE		E	Q	
CV31413	2SS	2B SGB SAMPLE # SM-236 (OUTSIDE CNTMT)	NF-39238	20	B	ACT-CLOSE		E	Q	
CV31639	2SS	2A SGB SAMPLE # SM-235 (INSIDE CNTMT)	NF-39238	20	B	ACT-CLOSE		E	Q	
CV31640	2SS	2B SGB SAMPLE # SM-236 (INSIDE CNTMT)	NF-39238	20	B	ACT-CLOSE		E	Q	
MV32406	2SS	PRZR STEAM SPACE SAMPLE VLV A	NF-39238	20	A	ACT-CLOSE	SP-2242	E	Q	
							SP-2072.15	LT	R	
MV32407	2SS	PRZR STEAM SPACE SAMPLE VLV B	NF-39238	20	A	ACT-CLOSE	SP-2242	E	Q	
							SP-2072.15	LT	R	
MV32408	2SS	PRZR LIQ SAMPLE VLV A	NF-39238	20	A	ACT-CLOSE	SP-2242	E	Q	
							SP-2072.16	LT	R	
MV32409	2SS	PRZR LIQ SAMPLE VLV B	NF-39238	20	A	ACT-CLOSE	SP-2242	E	Q	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
							SP-2072.16	LT	R	
MV32410	2SS	LOOP B HOT LEG SMPL	NF-39238	20	A	ACT-CLOSE	SP-2242	E	Q	
							SP-2072.17	LT	R	
MV32411	2SS	LOOP B HOT LEG SMPL	NF-39238	20	A	ACT-CLOSE	SP-2242	E	Q	
							SP-2072.17	LT	R	
2SM-10-1	2VC	SAMPLE RET LINE TO VOL CONTR TANK CHK	NF-39238	32	C	ACT-CLOSE		E	R	
2VC-13-1	2VC	VOLUME CONTROL TANK INLET CHK	HIAW 1001-5	32	C	ACT-CLOSE		E	R	
2VC-13-2	2VC	CHEM MIX TK #21 OUTLET TO VC TK #21 OLET CHK	HIAW 1001-5	32	C	ACT-CLOSE		E	CS	
2VC-14-1	2VC	SEAL WTR INJECT FILTERS TO RCP 21 CHK	HIAW 1001-4	31	A	ACT-CLOSE	SP-1279	E	CS	
							SP-2072.13A	LT	R	
2VC-14-2	2VC	SEAL WTR INJECT FILTERS TO RCP #22 CHK	HIAW 1001-4	31	A	ACT-CLOSE	SP-1279	E	CS	
							SP-2072.13B	LT	R	
2VC-17-1	2VC	CHARGING LINE CV-31420 BYPASS CHK	HIAW 1001-4	31	C	ACT-CLOSE		E	CS	
2VC-24-1	2VC	VOLUME CONTROL TANK #21 RELIEF	HIAW 1001-5	32	C	ACT-BOTH	P3120-75-2A	SP	10Y	
2VC-25-1	2VC	RC PUMPS DISCH LINE TO SEAL WTR FLTR RELIEF	HIAW 1001-4	31	C	ACT-BOTH	P3120-75-2B	SP	10Y	
2VC-26-1	2VC	REGEN HEAT EXCH #21 LTDN LINE OUTLT RELF	HIAW 1001-4	31	C	ACT-BOTH	P3120-75-2C	SP	10Y	
2VC-28-1	2VC	21 CHG PMP DISCH RELIEF	HIAW 1001-5	32	C	ACT-BOTH	P3120-75-21A	SP	10Y	
2VC-28-2	2VC	22 CHG PMP DISCH RELIEF	HIAW 1001-5	32	C	ACT-BOTH	P3120-75-22A	SP	10Y	
2VC-28-3	2VC	23 CHG PMP DISCH RELIEF	HIAW 1001-5	32	C	ACT-BOTH	P3120-75-23A	SP	10Y	
2VC-7-10	2VC	2-HCV-142 BY-PASS	HIAW 1001-5	32	A	PAS-CLOSE		PV	2Y	
							SP-2072.12	LT	R	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
2VC-7-11	2VC	DOWNSTREAM OF 2-HCV-142	HIAW 1001-5	32	A	ACT-CLOSE		E	CS	
							SP-2072.12	LT	R	
2VC-8-1	2VC	UPSTREAM OF REGENERATIVE HEAT EXCH #21	HIAW 1001-4	31	A, C	ACT-CLOSE		E	CS	
							SP-2072.12	LT	R	
2VC-8-10	2VC	DOWNSTREAM OF R C FILTER	HIAW 1001-5	32	C	ACT-CLOSE		E	CS	
2VC-8-11	2VC	BORIC ACID BLENDER SUCTION	HIAW 1001-5	32	C	ACT-CLOSE		E	CS	
2VC-8-14	2VC	R M W TO CHARGING PUMPS SUCT	HIAW 1001-5	32	C	ACT-CLOSE		E	CS	
2VC-8-2	2VC	DNSTREAM OF REGENERATIVE HEAT EXCH #21	HIAW 1001-4	31	C	ACT-CLOSE	SP-2237	E	CS	
2VC-8-3	2VC	21 REGEN HX AUX SPRAY TO 21 PRZR CV31421	HIAW 1001-4	31	C	ACT-CLOSE		E	CS	
2VC-8-4	2VC	R C PUMP #22 SUCTION	HIAW 1001-4	31	A, C	ACT-CLOSE	SP-2166	E	R	
							SP-2072.13B	LT	R	
2VC-8-5	2VC	R C PUMP #21 SUCTION	HIAW 1001-4	31	A, C	ACT-CLOSE	SP-2166	E	R	
							SP-2072.13A	LT	R	
2VC-8-6	2VC	R C PUMP #22 SUCTION	HIAW 1001-4	31	C	ACT-CLOSE	SP-2166	E	R	
2VC-8-7	2VC	R C PUMP #21 SUCTION	HIAW 1001-4	31	C	ACT-CLOSE	SP-2166	E	R	
CV31211	2VC	CHG LINE HCV	HIAW 1001-5	32	A	ACT-CLOSE	SP-2281	E	CS	
							SP-2072.12	LT	R	
CV31222	2VC	EXCESS LTDN HX OUTLET	HIAW 1001-4	31	B	ACT-CLOSE		E	CS	
CV31230	2VC	2 REAC CLNT LOOP PZR LTDN LN ISOL	HIAW 1001-3	30	B	ACT-CLOSE	SP-2162	E	CS	
CV31279	2VC	2 REAC CLNT LOOP PZR LTDN LN ISOL	HIAW 1001-3	30	B	ACT-CLOSE	SP-2162	E	CS	
CV31347	2VC	LETDOWN ORIFICE ISOL	HIAW 1001-4	31	A	ACT-CLOSE	SP-2162	E	CS	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
							SP-2072.11	LT	R	
CV31348	2VC	LETDOWN ORIFICE ISOL	HIAW 1001-4	31	A	ACT-CLOSE	SP-2162	E	CS	
							SP-2072.11	LT	R	
CV31349	2VC	LETDOWN ORIFICE ISOL	HIAW 1001-4	31	A	ACT-CLOSE	SP-2162	E	CS	
							SP-2072.11	LT	R	
CV31422	2VC	EXCESS LETDOWN HEAT EXCH INLET	HIAW 1001-4	31	B	ACT-CLOSE		E	CS	
CV31424	2VC	EXS LETDOWN HEAT EXCH TO SEAL WTR FLTR	HIAW 1001-4	31	B	PAS-NOTE 2		PV	2Y	
CV31430	2VC	LETDOWN CNTMT ISOL	HIAW 1001-4	31	A	ACT-CLOSE	SP-2162	E	CS	
							SP-2072.11	LT	R	
MV32194	2VC	SEAL RETURN CONT ISOL	HIAW 1001-4	31	A	ACT-CLOSE	SP-2280	E	CS	
							SP-2072.14	LT	R	
MV32210	2VC	SEAL RETURN CONT ISOL	HIAW 1001-4	31	A	ACT-CLOSE	SP-2280	E	CS	
							SP-2072.14	LT	R	
CV31619	2WL	SUMP A DISCH CNTMT ISOL VLV A	HIAW 1-123	N/A	A	ACT-CLOSE	SP-2284	E	Q	
							SP-2072.26	LT	R	
CV31620	2WL	SUMP A DISCH CNTMT ISOL VLV B	HIAW 1-123	N/A	A	ACT-CLOSE	SP-2284	E	Q	
							SP-2072.26	LT	R	
CV31731	2WL	RCDT TO GA CNTMT ISOL VLV A	HIAW 1-123	N/A	A	ACT-CLOSE	SP-2284	E	Q	
							SP-2072.21	LT	R	
CV31732	2WL	RCDT TO GA CNTMT ISOL VLV B	HIAW 1-123	N/A	A	ACT-CLOSE	SP-2284	E	Q	
							SP-2072.21	LT	R	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31733	2WL	RCDT TO VENT HDR CNTMT ISOL VLV A	HIAW 1-123	N/A	A	ACT-CLOSE	SP-2284	E	Q	
							SP-2072.4	LT	R	
CV31734	2WL	RCDT TO VENT HDR CNTMT ISOL VLV B	HIAW 1-123	N/A	A	ACT-CLOSE	SP-2284	E	Q	
							SP-2072.4	LT	R	
CV31735	2WL	RCDT DISCH CNTMT ISOL VLV A	HIAW 1-123	N/A	A	ACT-CLOSE	SP-2284	E	Q	
							SP-2072.5	LT	R	
CV31736	2WL	RCDT DISCH CNTMT ISOL VLV B	HIAW 1-123	N/A	A	ACT-CLOSE	SP-2284	E	Q	
							SP-2072.5	LT	R	
CV31314	2ZP	INSERVICE PURGE EXH ISOL B	NF-36902-2	N/A	A	ACT-CLOSE		E	AR	
								LT	R	
CV31315	2ZP	INSERVICE PURGE EXH ISOL A	NF-36902-2	N/A	A	ACT-CLOSE		E	AR	
								LT	R	
CV31627	2ZP	CNTMT VAC BRKR PWR OP	NF-36902-2	N/A	A	ACT-BOTH	SP-2130	E	Q	
							SP-2072.41A	LT	R	
CV31628	2ZP	CNTMT VAC BRKR PWR OP	NF-36902-2	N/A	A	ACT-BOTH	SP-2130	E	Q	
							SP-2072.41B	LT	R	
CV31630	2ZP	CNTMT VAC BRKR GRAV OP	NF-36902-2	N/A	A, C	ACT-BOTH	SP-2130	E	Q	
							SP-2072.41A	LT	R	
CV31631	2ZP	CNTMT VAC BRKR GRAV OP	NF-36902-2	N/A	A, C	ACT-BOTH	SP-2130	E	Q	
							SP-2072.41B	LT	R	
CV31635	2ZP	INSERVICE PURGE SUPPLY ISOL B	NF-36902-2	N/A	A	ACT-CLOSE		E	AR	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
								LT	R	
CV31636	2ZF	INSERVICE PURGE SUPPLY ISOL A	NF-36902-2	N/A	A	ACT-CLOSE		E	AR	
								LT	R	
CV39413	2ZX	COOLING WATER TO 21 & 23 FCU	NF-86172-1	41	B	ACT-OPEN	SP-1245	E	Q	
CV39414	2ZX	21& 23 FCU CHILLED WATER SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-1245	E	Q	
CV39415	2ZX	COOLING WATER TO 22 & 24 FCU	NF-86172-1	41	B	ACT-OPEN	SP-1245	E	Q	
CV39416	2ZX	22& 24 FCU CHILLED WATER SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-1245	E	Q	
CV39417	2ZX	21 SHROUD CLG COILS TR A CW SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-2297	E	Q	
CV39418	2ZX	22 SHROUD CLG COILS TR B CW SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-2297	E	Q	
CV39419	2ZX	21 SHROUD CLG COILS TR A CW SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-2297	E	Q	
CV39420	2ZX	22 SHROUD CLG COILS TR B CW SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-2297	E	Q	
CV39421	2ZX	COOLING WATER FROM 21 & 23 FCU	NF-86172-1	41	B	ACT-OPEN	SP-1245	E	Q	
CV31422	2ZX	22& 24 FCU CHILLED WATER SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-1245	E	Q	
CV31423	2ZX	COOLING WATER FROM 22 & 24 FCU	NF-86172-1	41	B	ACT-OPEN	SP-1245	E	Q	
CV31424	2ZX	21& 23 FCU CHILLED WATER SUPPLY CV	NF-86172-1	41	B	ACT-CLOSE	SP-1245	E	Q	

SECTION 2.4 REQUESTS FOR RELIEF FROM ASME CODE SECTION XI  
REQUIREMENTS DETERMINED TO BE IMPRACTICAL

UNIT NO 2 COMPONENTS

This section contains a tabulation of the requirements contained in Section XI of the ASME Code that we have determined are impractical on Unit 2.

The Requests for Relief included in the program for Unit 2 are listed below.

<u>REQUEST FOR RELIEF NO.</u>	<u>SUBJECT</u>
1	Pump Vibration
2	Flow Instrumentation Accuracy
3	Visual Verification of Valves
4	Pump Vibration Sensor Locations
6	Unused
7	Unused
8	Unused
9	Unused

## 1. REQUEST FOR RELIEF

COMPONENT	FUNCTION	ASME Code Class	ASME Vlv Cat
21, 22 Safety Injection Pump	Deliver cooling water to the reactor core in the event of a loss of coolant accident.	2	----
21, 22 Containment Spray Pump	Provide sufficient heat removal capability to maintain the post accident containment pressure below the design pressure.	2	----
21, 22 Component Cooling Pump	Remove heat from components associated with removal of reactor core decay heat under accident conditions	3	----

### CODE REQUIREMENT

Relief is requested from OMa 1988, part 6 Table 3 which requires vibration alert limits for centrifugal pumps to be  $>2.5V_r$  to  $6 V_r$  or  $> 0.325$  in/sec.

### ALTERNATE TESTING

Alert limits will be set using pump vibration history. Limits will be established per the Code unless the value becomes  $> 0.325$  inches/sec. In those cases the alert limit will be set at  $V_r + 0.2$  inches/sec.



## ALTERNATE TESTING (CONT'D)

### 21, 22 SI Pumps

Alert limits at locations on the pump which are above Code value will be compared with alert limits on the pump which are within Code acceptable values. Subsequent data will be evaluated based on pump vibration trending and history.

In addition to quarterly miniflow test data, full flow vibration data will be taken and analyzed once per refueling.

### 21, 22 CS Pumps

Alert limits at locations on the pump which are above Code value will be compared with alert limits on the pump which are within Code acceptable values. Subsequent data will be evaluated based on pump vibration trending and history.

### 21, 22 CC Pumps

Vibration limits depend on sensor location and pump flow. Limits will be established based on these variables.

## 1. REQUEST FOR RELIEF (COND'T)

### BASIS FOR REQUESTING RELIEF

#### 21, 22 SI Pumps

The Code alert limits will not be met because the Code does not recognize the higher vibration levels at minimum flow. The higher vibration levels are at higher frequencies which can be accounted for by internal hydraulic forces (i.e, vane passing frequencies). Trending of vibration data at both minimum flow and full flow will adequately reflect changes in pump conditions.

#### 21, 22 CS Pumps

The Code alert limits will not be met because the Code does not recognize the higher vibration levels at minimum flow. A second contributing factor is the effect of piping configuration. Trending of vibration data will adequately reflect changes in pump condition.

#### 21, 22 CC Pumps

The component cooling system resistance cannot be adjusted to achieve a standard reference point during a test. Per the Code, flow and pressure readings will be taken and compared to reference values. These reference values will be based on pump performance and history when it was in good mechanical condition. Certain vibration points are sensitive to flow conditions, particularly low flows. The outboard pump bearing is very load sensitive and vibration varies by as much as 100%. Vibration readings will be correlated to pressure/flow readings.

### JUSTIFICATION

All pumps have a detailed vibration history which is trended and available to the engineering staff. Operating history and availability of these pumps has been excellent with no failures. The pump manufacturers are in agreement that pump degradation can be monitored by trending vibration levels from a reference point properly established. Alternate acceptance criteria established as described above will give adequate indications of pump degradation.

## 2. REQUEST FOR RELIEF

COMPONENTS	FUNCTION	ASME Code Class	ASME Code Class
21, 22 Component Cooling Pump	Remove heat from components associated with removal of reactor core decay heat under accident conditions.	3	----

### CODE REQUIREMENTS

OMa 1988 Part 6, Section 4.6 requires flow instrumentation be accurate within  $\pm 2\%$ .

### ALTERNATE TESTING

Presently installed instrumentation is accurate to  $\pm 3\%$ . This accuracy is sufficient to allow measurement of flow changes.

### BASIS FOR REQUESTING RELIEF

The addition of a more accurate flowmeter would require a plant modification with little increase in safety.

### JUSTIFICATION

During each surveillance test the pump differential pressure vs. flow is compared to an acceptance curve based on the code. The component cooling water flow indicators have accuracy which is sufficient to measure change in flow and pump degradation. In addition, the pump acceptance curves will be reduced by 1% of normal flow to account for the higher instrument accuracy.

### 3. REQUEST FOR RELIEF

COMPONENT		FUNCTION	ASME Code class	ASME Vlv Cat
MV-32178	Containment Sump B Isolation Valve A1	Open to provide for ECC during recirculation phase, close for Containment Isolation.	2	A
MV-32179	Containment Sump B Isolation Valve A2	Open to provide for ECC during recirculation phase, close for Containment Isolation.	2	A

#### CODE REQUIREMENT

OMA-1988 Part 10, Section 4.1 requires valves with remote position indicators to be observed locally at least once every two years to verify valve operation is accurately indicated.

#### ALTERNATE TESTING

System characteristics and/or visual observation will be used to determine obturator movement. The valves are enclosed by valve enclosures which are part of the containment barrier. It is not considered practical to disassemble these enclosures to verify correct position indication. The valves are leak tested in the closed position each refueling outage and will be visually verified to stroke whenever the cover is removed.

#### BASIS FOR REQUESTING RELIEF

Valve design does not allow for easy access to valves for inspection of position. Removing the valve cover would be a hardship with no equivalent increase in safety.

#### JUSTIFICATION

These valves are full stroked and timed both open and closed each refueling outage. Any change in the position indication system would be reflected in the timing. This stroking plus periodic inspection whenever the cover is removed gives adequate indication that the valve is operable.

#### 4. REQUEST FOR RELIEF

COMPONENT	FUNCTION	ASME CODE CLASS	ASME VLV. CAT.
21, 22 Residual Heat Removal Pumps	Deliver cooling water to the reactor core in the event of a loss of coolant accident.	2	—

#### CODE REQUIREMENT

On vertical line shaft pumps, vibration measurements shall be taken on the upper motor bearing housing in three orthogonal directions, one of which is the axial direction.

#### ALTERNATE TESTING

Two existing installed probes which measure vibration in two orthogonal directions will be used.

#### BASIS FOR REQUESTING RELIEF

The upper motor thrust bearing housing is inaccessible for an axial measurement. Portable instrumentation would be difficult to use due to a domed cover over the pump housing which limits access and would tend to amplify any readings. The addition of a permanent probe would be costly with no commensurate benefit to safety.

#### JUSTIFICATION

The thrust bearing on this pump would transfer a component of the axial vibration to the radial probes.

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Pos'n	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
AF-12-1	AF	AUX FW TO 11 STM GEN ISOL	NF-39222	16	OPEN	EXCLUDED					
AF-12-2	AF	AUX FW TO 12 STM GEN ISOL	NF-39222	16	OPEN	EXCLUDED					
AF-13-1	AF	12 & 21 AUX FW PUMPS DISCHARGE X-CORIN	NF-39222	16	CLOSE	B	ACT-BOTH	SP-1730	E	CS	
AF-13-3	AF	11 AUX FW PUMP DISCH	NF-39222	16	OPEN	EXCLUDED					
AF-13-4	AF	12 AUX FW PUMP DISCH	NF-39222	16	OPEN	EXCLUDED					
AF-14-1	AF	11 AUX FW PUMP SUCT CHK	NF-39222	16	OPN/CLS	C	ACT-OPEN		E	CS	
AF-14-3	AF	12 AUX FW PUMP SUCT CHK	NF-39222	16	OPN/CLS	C	ACT-OPEN		E	CS	
AF-15-1	AF	AUX FW TO STM GEN 11 CHK	NF-39222	16	OPN/CLS	C	ACT-BOTH		E	CS	
AF-15-2	AF	AUX FW TO 5" M GEN 12 CHK	NF-39222	16	OPN/CLS	C	ACT-BOTH		E	CS	
AF-15-3	AF	AUX FW TO STM GEN 11 CHK	NF-39222	16	OPN/CLS	C	ACT-BOTH		E	CS	
AF-15-4	AF	AUX FW TO STM GEN 12 CHK	NF-39222	16	OPN/CLS	C	ACT-BOTH		E	CS	
AF-15-9	AF	11 AUX FW PUMP DISCH CHK	NF-39222	16	OPN/CLS	C	ACT-BOTH		E	CS	
AF-15-10	AF	12 AUX FW PUMP DISCH CHK	NF-39222	16	OPN/CLS	C	ACT-BOTH		E	CS	
AF-16-1	AF	AUX FW AT STM GEN 11 CHK	NF-39222	16	OPN/CLS	C	ACT-BOTH		E	CS	
AF-16-2	AF	AUX FW AT STM GEN 12 CHK	NF-39222	16	OPN/CLS	C	ACT-BOTH		E	CS	
AF-17-1	AF	11 AUX FW PUMP MIN FLOW BY-PASS	NF-39222	16	CLOSE	EXCLUDED					
AF-17-2	AF	12 AUX FW PUMP MIN FLOW BY-PASS	NF-39222	16	CLOSE	EXCLUDED					
AF-18-1	AF	11 X FW PUMP RECIRC/LUBE OIL COOLING ISOL	NF-39222	16	OPEN	EXCLUDED					
AF-18-12	AF	CHEM FEED INLET TO 11 SG	NF-39222	16	OPEN	EXCLUDED					
AF-18-13	AF	11 AUX FDWTR PUMP CASING DRAIN	NF-39222	16	CLOSE	EXCLUDED					
AF-18-14	AF	12 AUX FDWTR PUMP CASING DRAIN	NF-39222	16	CLOSE	EXCLUDED					
AF-18-15	AF	CHEM FD CONN FOR 12 AFWP DISCH TO 12 SG	NF-39222	16	OPEN	EXCLUDED					
AF-18-2	AF	12 AUX FW PUMP RECIRC/LUBE OIL COOLING ISOL	NF-39222	16	OPEN	EXCLUDED					
AF-18-3	AF	CHEM FEED INLET TO 12 SG	NF-39222	16	OPEN	EXCLUDED					
AF-18-4	AF	CHEM FD CONN FOR 12 AFWP DISCH TO 11 SG	NF-39222	16	OPEN	EXCLUDED					
AF-19-5	AF	11 AUX FDWTR PUMP DISCH LINE DRAIN	NF-39222	16	CLOSE	EXCLUDED					
AF-19-6	AF	12 AUX FDWTR PUMP DISCH LINE DRAIN	NF-39222	16	CLOSE	EXCLUDED					
AF-21-1	AF	11 AUX FDWTR PUMP SUCT DRAIN	NF-39222	16	CLOSE	EXCLUDED					
AF-21-2	AF	12 AUX FDWTR PUMP SUCT DRAIN	NF-39222	16	CLOSE	EXCLUDED					
AF-21-5	AF	11 FDWTR PUMP SUCT VENT	NF-39222	16	CLOSE	EXCLUDED					
AF-21-6	AF	12 FDWTR PUMP SUCT VENT	NF-39222	16	CLOSE	EXCLUDED					
AF-26-5	AF	11 AFWP RECIRC LINE OIL COOLER OUT TO DRAIN	NF-39222	16	CLOSE	EXCLUDED					
AF-26-6	AF	12 AFWP RECIRC LINE OIL COOLER OUT TO DRAIN	NF-39222	16	CLOSE	EXCLUDED					
AF-26-7	AF	11 AFWP TURB LUBE OIL CLG WTR SUPPLY	NF-39222	16	OPEN	EXCLUDED					
AF-28-1	AF	11 AUX FW PUMP RECIRC LINE CHECK	NF-39222	16	OPN/CLS	C	ACT-OPEN		E	Q	
AF-28-2	AF	12 AUX FW PUMP RECIRC LINE CHECK	NF-39222	16	OPN/CLS	C	ACT-OPEN		E	Q	
AF-28-5	AF	11 AUX FDWTR PUMP TURBINE DRIVEN DWNSTRM	NF-39222	16	OPN/CLS	EXCLUDED	NOTE 7				
AF-28-6	AF	12 AUX FDWTR PUMP MOTOR DRIVEN DWNSTRM	NF-39222	16	OPN/CLS	EXCLUDED	NOTE 7				
AF-29-1	AF	11 AUX FD PUMP SUCT RELIEF	NF-39222	16	CLOSE	C	ACT-BOTH	P3120-1-11A	SP	10Y	
AF-29-2	AF	12 AUX FD PUMP SUCT RELIEF	NF-39222	16	CLOSE	C	ACT-BOTH	P3120-1-12A	SP	10Y	
AF-30-1	AF	46A PENETRATION LEAK TEST	NF-39222	16	CLOSE	EXCLUDED					
AF-30-2	AF	46B PENETRATION LEAK TEST	NF-39222	16	CLOSE	EXCLUDED					
AF-31-1	AF	CHEM FEED ISOL TO 12 SG	NF-39222	16	OPEN	EXCLUDED					
AF-31-2	AF	CHEM FEED ISOL TO 11 SG	NF-39222	16	OPEN	EXCLUDED					
AF-32-1	AF	MV32239 DISCHARGE LINE DRAIN	NF-39222	16	OPEN	EXCLUDED					
AF-32-2	AF	MV32238 DISCHARGE LINE DRAIN	NF-39222	16	OPEN	EXCLUDED					
AF-34-1	AF	11 AUX FW TURB BRG CLG WATER RELIEF	NF-39222	16	OPN/CLS	EXCLUDED	NOTE 3	P3120-1-11B	SP	10Y	
AF-35-1	AF	11 AFWP TURB OIL CLG SUPPLY 7TRMR DRN	NF-39222	16	OPEN	EXCLUDED					
CF-11-1	AF	CHEM ADD TO AFW CHK	NF-39239	16	BOTH	EXCLUDED					
CF-11-2	AF	CHEM ADD TO AFW CHK	NF-39239	16	BOTH	EXCLUDED					
GV31153	AF	11 TO AFWP RECIRC/LUBE OIL CLG CV	NF-39222	16	CLOSE	B	ACT-OPEN	SP-1102	E	Q	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31154	AF	12 MD AFWP RECIRCULATE OIL CLG CV	NF-39222	16	CLOSE	B	ACT-OPEN	SP-1100	E	Q	
MV32238	AF	AUX FDWTR TO STM GEN #11	NF-39222	16	OPEN	B	ACT-BOTH	SP-1102	E	Q	
MV32239	AF	AUX FDWTR TO STM GEN #12	NF-39222	16	OPEN	B	ACT-BOTH	SP-1102	E	Q	
MV32242	AF	AUX FDWTR TO STM GEN #11	NF-39222	16	OPEN	B	PAS-OPEN		PV	2Y	
MV32243	AF	AUX FDWTR TO STM GEN #12	NF-39222	16	OPEN	B	PAS-OPEN		PV	2Y	
MV32333	AF	11 AUX FDWTR PUMP SUCT	NF-39222	16	OPEN	B	ACT-BOTH	SP-1100	E	Q	
MV32335	AF	12 AUX FDWTR PUMP SUCT	NF-39222	16	OPEN	B	ACT-BOTH	SP-1102	E	Q	
MV32381	AF	AUX FW TO STM GEN #11	NF-39222	16	OPEN	B	ACT-BOTH	SP-1100	E	Q	
MV32382	AF	AUX FW TO STM GEN #12	NF-39222	16	OPEN	B	ACT-BOTH	SP-1100	E	Q	
CA-1-1	CA	CAUSTIC ADD TRAIN A TO 11 & 12 CS PMP	NF-39252	18	OPEN	EXCLUDED					
CA-1-2	CA	CAUSTIC ADD TRAIN A TO 11 & 12 CS PMP	NF-39252	18	OPEN	EXCLUDED					
CA-1-3	CA	CAUSTIC ADD TRAIN B TO 11 & 12 CS PMP	NF-39252	18	OPEN	EXCLUDED					
CA-1-4	CA	CAUSTIC ADD TRAIN B TO 11 & 12 CS PMP	NF-39252	18	OPEN	EXCLUDED					
CA-11-1	CA	CAUSTIC ADDITION TO 11 & 12 CS PUMPS	NF-39252	18	OPEN	C	ACT-BOTH		E	R	
CA-12-1	CA	LINE VENT DOWNSTREAM OF VALVE CA-11-1	NF-39252	18	CLOSE	EXCLUDED					
CA-15-1	CA	LINE DRAIN DOWNSTREAM OF CHK VA CA-11-1	NF-39252	18	OPEN	EXCLUDED					
CA-16-1	CA	TRAIN A DEMIN WTR FLUSHING CONN	NF-39252	18	CLOSE	EXCLUDED					
CA-16-2	CA	TRAIN B DEMIN WTR FLUSHING CONN	NF-39252	18	CLOSE	EXCLUDED					
CA-4-2	CA	TRAIN A ISOLATION VALVE-SAMPLE LINE	NF-39252	18	CLOSE	EXCLUDED					
CA-4-3	CA	TRAIN B ISOLATION VALVE-SAMPLE LINE	NF-39252	18	CLOSE	EXCLUDED					
CA-6-2	CA	LINE VENT-UPSTREAM OF CV-31938	NF-39252	18	CLOSE	EXCLUDED					
CA-6-3	CA	LINE VENT-UPSTREAM OF CV-31941	NF-39252	18	CLOSE	EXCLUDED					
CA-9-1	CA	11 CAUSTIC ADDITION RECIRC PUMP SUCTION	NF-39252	18	CLOSE	EXCLUDED					
CV31938	CA	12 CS SUCT PUMP FROM NaOH STOPIPE ISOL	NF-39252	18	CLOSE	B	ACT-OPEN	SP-1090	E	Q	
CV31941	CA	11 CS PUMP SUCT FROM NaOH STOPIPE ISOL	NF-39252	18	CLOSE	B	ACT-OPEN	SP-1090	E	Q	
CC-1-1	CC	11 COMP CLG PMP SUCT	NF-39245-1	23	OPEN	EXCLUDED					
CC-1-11	CC	11 & 12 COMP COOLING PUMP SUCT X-CONN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-1-12	CC	11 & 12 COMP COOLING PUMP SUCT X-CONN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-1-13	CC	11 & 12 COMP COOLING PUMP DISCH X-CONN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-1-14	CC	11 & 12 COMP COOLING PUMP DISCH X-CONN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-1-15	CC	UNITS 1 & 2 COMP CLG PUMPS SUCT X-CONN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-1-16	CC	UNITS 1 & 2 COMP CLG PUMPS DISCH X-CONN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-1-2	CC	12 COMP CLG PMP SUCT	NF-39245-1	23	OPEN	EXCLUDED					
CC-1-3	CC	11 COMP CLG PMP DISCH	NF-39245-1	23	OPEN	EXCLUDED					
CC-1-4	CC	12 COMP CLG PMP DISCH	NF-39245-1	23	OPEN	EXCLUDED					
CC-1-5	CC	11 COMP CLG HT EXGR INLET	NF-39245-1	23	OPEN	EXCLUDED					
CC-1-6	CC	12 COMP CLG HT EXGR INLET	NF-39245-1	23	OPEN	EXCLUDED					
CC-1-7	CC	11 COMP CLG HT EXGR OUTLET	NF-39245-1	23	OPEN	EXCLUDED					
CC-1-8	CC	12 COMP CLG HT EXGR OUTLET	NF-39245-1	23	OPEN	EXCLUDED					
CC-1-9	CC	RETURN LINE TO 11 COMP COOLING PMP	NF-39245-1	23	OPEN	EXCLUDED					
CC-1-10	CC	RETURN LINE TO 12 COMP COOLING PUMP	NF-39245-1	23	OPEN	EXCLUDED					
CC-14-5	CC	11 RCP BRG CLG WTR RETURN CHK	NF-39245-1	23	OPEN	C	ACT-BOTH		E	CS	
CC-14-6	CC	12 RCP BRG CLG WTR RETURN CHK	NF-39245-1	23	OPEN	C	ACT-BOTH		E	CS	
CC-18-1	CC	12 RCP BRG WTR SUPPLY CHK	NF-39245-1	23	OPEN	C	ACT-BOTH		E	CS	
CC-18-2	CC	11 RCP BRG WTR SUPPLY CHK	NF-39245-1	23	OPEN	C	ACT-BOTH		E	CS	
CC-19-1	CC	11 COMPONENT CLG SURGE TANK OUTLET	NF-39245-1	23	OPEN	EXCLUDED					
CC-20-9	CC	COLD SAMPLE CONDITIONING RETURN FROM U 2	NF-39246-2	39	OPEN	EXCLUDED					
CC-21-2	CC	12 REACTOR COOLANT PMP BRG WTR SUPPLY	NF-39245-1	23	OPEN	EXCLUDED					
CC-21-3	CC	11 REACTOR COOLANT PMP BRG WTR SUPPLY	NF-39245-1	23	OPEN	EXCLUDED					
CC-22-1	CC	12 REACTOR COOLANT PU BRG CLG WTR RET	NF-39245-1	23	OPEN	EXCLUDED					
CC-22-2	CC	11 REACTOR COOLANT PU BRG CLG WTR RET	NF-39245-1	23	OPEN	EXCLUDED					



## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CC-23-1	CC	11 EXCESS LETDOWN HT EXCH INLET CHK	NF-39245-1	23	OPEN	C	ACT-CLOSE		E	CS	
CC-24-1	CC	EXCESS LTDN OUTLT CHK	NF-39245-1	23	OPEN	C	ACT-CLOSE		E	CS	
CC-26-1	CC	11 CC SURGE TANK DRAIN TO WASTE HU TANK	NF-39245-1	23	CLOSE	EXCLUDED					
CC-27-8	CC	11 CC SURGE TANK X-TIE ISOL	NF-39245-1	23	OPEN	EXCLUDED					
CC-28-6	CC	11 REACT CLNT PUMP BRG CLG RETURN	NF-39245-1	23	OPEN	EXCLUDED					
CC-28-7	CC	12 REACT CLNT PUMP BRG CLG RETURN	NF-39245-1	23	OPEN	EXCLUDED					
CC-29-1	CC	12 RCP BRG WTR SUPPLY CHK	NF-39245-1	23	OPN/CLS	C	ACT-OPEN		E	Q	
CC-29-2	CC	11 RCP BRG WTR SUPPLY CHK	NF-39245-1	23	OPN/CLS	C	ACT-OPEN		E	Q	
CC-3-1	CC	11 COMPONENT COOLING PUMP DISCH CHK	NF-39245-1	23	OPEN	C	ACT-OPEN	SP-1155	E	Q	
CC-3-2	CC	12 COMPONENT COOLING PUMP DISCH CHK	NF-39245-1	23	OPEN	C	ACT-OPEN	SP-1155	E	Q	
CC-3-3	CC	RETURN LINE TO 11 COMP COOLING PUMP CHK	NF-39245-1	23	OPEN	C	ACT-BOTH		E	CS	
CC-3-4	CC	RETURN LINE TO 12 COMP COOLING PUMP CHK	NF-39245-1	23	OPEN	C	ACT-BOTH		E	CS	
CC-30-1	CC	12 SI PU SUPPLY TO SEAL HT EXCH & STUFF BOX	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-10	CC	11 RHR PU RETURN FROM HT EXCH & STUFF BOX	NF-39245-1	23	THROT	EXCLUDED					
CC-30-11	CC	12 COMPONENT CLG PU RECIRC LINE	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-12	CC	11 COMPONENT CLG PU RECIRC LINE	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-15	CC	11 CNTMT SPRAY PUMP HT EXCH-SUPPLY	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-16	CC	12 CNTMT SPRAY PUMP HT EXCH-SUPPLY	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-17	CC	11 CNTMT SPRAY PUMP HT EXCH-RETURN	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-18	CC	12 CNTMT SPRAY PUMP HT EXCH-RETURN	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-19	CC	12 CONT SPRAY PUMP SUPPLY LINE VENT	NF-39245-1	23	CLOSE	EXCLUDED					
CC-30-2	CC	12 SI PMP RET FROM SEAL HT EXCH & STUFF BOX	NF-39245-1	23	THROT	EXCLUDED					
CC-30-20	CC	12 CONT SPRAY PUMP DISCH LINE VENT	NF-39245-1	23	CLOSE	EXCLUDED					
CC-30-3	CC	12 SI PMP RTRN FROM SEAL HT/STUFF BOX	NF-39245-1	23	THROT	EXCLUDED					
CC-30-4	CC	11 SI PMP SUPPLY TO SEAL HT EXCH/STUFF BOX	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-5	CC	11 SI PMP RTRN FROM SEAL HT EXCH/STUFF BOX	NF-39245-1	23	THROT	EXCLUDED					
CC-30-6	CC	11 SI PMP RTRN FROM SEAL HT EXCH/STUFF BOX	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-7	CC	12 RHR PU SUPPLY TO HT EXCH & STUFF BOX	NF-39245-1	23	OPEN	EXCLUDED					
CC-30-8	CC	12 RHR PU RETURN FROM HT EXCH & STUFF BOX	NF-39245-1	23	THROT	EXCLUDED					
CC-30-9	CC	11 RHR PU SUPPLY TO HT EXCH & STUFF BOX	NF-39245-1	23	OPEN	EXCLUDED					
CC-31-1	CC	12 REACTOR COOLANT PMP BRG WTR SPPLY	NF-39245-1	23	OPEN	EXCLUDED					
CC-31-2	CC	11 REACTOR COOLANT PMP BRG WTR SPPLY	NF-39245-1	23	OPEN	EXCLUDED					
CC-31-3	CC	11 CC HEAT EXCH OUTLET TO RAD MONITOR	NF-39245-1	23	OPEN	EXCLUDED					
CC-31-4	CC	12 CC HEAT EXCH OUTLET TO RAD MONITOR	NF-39245-1	23	OPEN	EXCLUDED					
CC-32-1	CC	12 REACTOR COOLANT PU BRG CLG WTR RETURN	NF-39245-1	23	OPEN	EXCLUDED					
CC-32-2	CC	11 REACTOR COOLANT PU BRG CLG WTR RETURN	NF-39245-1	23	OPEN	EXCLUDED					
CC-33-10	CC	12 RESID HT EXCH DRAIN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-33-11	CC	11 RESID HT EXCH DRAIN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-33-16	CC	11 SAFETY INJ PUMP CLG WTR SUPPLY DRAIN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-33-17	CC	12 SAFETY INJ PUMP CLG WTR SUPPLY DRAIN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-33-18	CC	11 SAFETY INJ PUMP CLG WTR RET DRAIN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-33-19	CC	12 SAFETY INJ PUMP CLG WTR RET DRAIN	NF-39245-1	23	CLOSE	EXCLUDED					
CC-33-22	CC	12 " COMP CLG WTR SUPPLY HDR VENT	NF-39245-1	23	OPEN	EXCLUDED					
CC-33-23	CC	12 " COMP CLG WTR RETURN HDR VENT	NF-39245-1	23	OPEN	EXCLUDED					
CC-33-26	CC	10" RET HDR FROM #11 RESID HT EXCH - VENT	NF-39245-1	23	CLOSE	EXCLUDED					
CC-33-27	CC	10" RET HDR FROM #12 RESID HT EXCH - VENT	NF-39245-1	23	CLOSE	EXCLUDED					
CC-33-28	CC	121 & 122 SPENT FUEL PIT HT EXCH SUP VENT	NF-39245-2	23	CLOSE	EXCLUDED					
CC-33-29	CC	11 RESIDUAL HT EXCH VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-3	CC	11 COMP CLG SURGE TANK GAGE GLASS	NF-39245	23	OPEN	EXCLUDED					
CC-33-30	CC	12 RESIDUAL HT EXCH VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-31	CC	11 COMP CLG PUMP SUCTION LINE DRAIN	NF-39245	23	CLOSE	EXCLUDED					



Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CC-33-32	CC	12 COMP CLG PUMP SUCTION LINE DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-33	CC	11 COMP CLG PUMP DISCH LINE DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-34	CC	11 COMP CLG PUMP DISCH LINE DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-35	CC	12 COMP CLG PUMP DISCH LINE DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-36	CC	12 COMP CLG PUMP DISCH LINE DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-37	CC	11 & #12 CC PUMP DISCH CROSS - CORIN DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-38	CC	11 COMP CLG PUMP DISCH LINE VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-39	CC	12 COMP CLG PUMP DISCH LINE VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-40	CC	11 COMP CLG SURGE TANK GAGE GLASS	NF-39245	23	OPEN	EXCLUDED					
CC-33-41	CC	12 COMP CLG HT EXCH OUTLET DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-42	CC	10" RET HDR FROM #12 RESID HT EXCH - VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-43	CC	11 EXCESS LETDOWN HT EXCH - SUPPLY VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-44	CC	11 EXCESS LETDOWN HT EXCH - SUPPLY DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-45	CC	11 EXCESS LETDOWN HT EXCH - SUPPLY VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-46	CC	11 EXCESS LETDOWN HT EXCH - RELIEF DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-47	CC	11 EXCESS LETDOWN HT EXCH - RELIEF VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-48	CC	11 EXCESS LETDOWN HT EXCH - RETURN VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-49	CC	11 EXCESS LETDOWN HT EXCH - RETURN DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-50	CC	11 COMPONENT CLG SURGE TANK SAMPLE	NF-39245	23	CLOSE	EXCLUDED					
CC-33-51	CC	11 REACT CLNT PUMP BRG CLG SUPPLY VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-52	CC	11 REACT CLNT PUMP BRG CLG SUPPLY DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-53	CC	11 COMP CLG PUMP CASING DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-54	CC	12 REACTOR CLNT PMP BRG CLG SUPPLY VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-55	CC	12 REACTOR CLNT PMP UPPER BRG CLG DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-58	CC	12 REACT CLNT PUMP BRG CLG RETURN DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-59	CC	12 EXCESS LETDOWN HT EXCH - SUPPLY DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-60	CC	12 EXCESS LETDOWN HT EXCH - RELIEF VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-61	CC	12 EXCESS LETDOWN HT EXCH - RETURN VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-33-64	CC	12 EXCESS LETDOWN HT EXCH - RETURN DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-33-67	CC	12 REACT CLNT PUMP BRG CLG RETURN DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-34-45	CC	11 EXCESS LETDOWN HT EX SUPPLY VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-34-6	CC	11 EXCESS LETDOWN HT EX SUPPLY DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-35-1	CC	12 RESID HT REM PUMP SUPPLY TO STUFF BOX	NF-39245	23	OPEN	EXCLUDED					
CC-35-10	CC	11 CNT'MT SPRAY PUMP HT EXCH RETURN	NF-39245	23	THROT	EXCLUDED					
CC-35-11	CC	12 CNT'MT SPRAY PUMP HT EXCH SUPPLY	NF-39245	23	OPEN	EXCLUDED					
CC-35-12	CC	12 CNT'MT SPRAY PUMP HT EXCH RETURN	NF-39245	23	THROT	EXCLUDED					
CC-35-13	CC	11 RESID HT REM PUMP CLG RETURN - DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-35-14	CC	12 RESID HT REM PUMP CLG RETURN - DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-35-15	CC	11 CS PUMP HT EXCH RET VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-35-18	CC	11 CS PUMP HT EXCH SUPPLY DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-35-17	CC	12 CS PUMP HT EXCH SUPPLY DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-35-2	CC	12 RESID HT REM PUMP SUPPLY TO HT EXCH	NF-39245	23	OPEN	EXCLUDED					
CC-35-3	CC	12 RESID HT REM PUMP RET FROM STUFF BOX	NF-39245	23	OPEN	EXCLUDED					
CC-35-4	CC	12 RESID HT REM PUMP RET FROM HT EXCH	NF-39245	23	OPEN	EXCLUDED					
CC-35-5	CC	11 RESID HT REM PUMP SUPPLY TO STUFF BOX	NF-39245	23	OPEN	EXCLUDED					
CC-35-6	CC	11 RESID HT REM PUMP SUPPLY TO HT EXCH	NF-39245	23	OPEN	EXCLUDED					
CC-35-7	CC	11 RESID HT REM PUMP RET FROM STUFF BOX	NF-39245	23	OPEN	EXCLUDED					
CC-35-8	CC	11 RESID HT REM PUMP RET FROM HT EXCH	NF-39245	23	OPEN	EXCLUDED					
CC-35-9	CC	11 CNT'MT SPRAY PUMP HT EXCH SUPPLY	NF-39245	23	OPEN	EXCLUDED					

Valve Number	Sys	Description	P&ID	Code	Normal Position	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CC-36-3	CC	12 REACTOR COOLANT PUMP LWR BRG RET	NF-39245	23	OPEN	EXCLUDED					
CC-36-4	CC	11 REACTOR COOLANT PUMP LWR BRG RET	NF-39245	23	OPEN	EXCLUDED					
CC-37-1	CC	11 COMPONENT COOLING HT EXCH RELIEF	NF-39245	23	OPN/CLS	EXCLUDED	NOTE 3				
CC-37-14	CC	11 EXCESS LETDOWN HEAT EXCH RELIEF	NF-39245	23	OPN/CLS	EXCLUDED	NOTE 3				
CC-37-2	CC	12 COMPONENT COOLING HT EXCH RELIEF	NF-39245	23	OPN/CLS	EXCLUDED	NOTE 3				
CC-38-1	CC	11 RESIDUAL HEAT EXCHANGER RELIEF	NF-39245	23	OPN/CLS	EXCLUDED	NOTE 3				
CC-38-2	CC	12 RESIDUAL HEAT EXCHANGER RELIEF	NF-39245	23	OPN/CLS	EXCLUDED	NOTE 3				
CC-42-1	CC	UNIT 1 & 2 CC SURGE TANK EQUALIZATION LINE	NF-39245	23	CLOSE	EXCLUDED					
CC-5-1	CC	RETURN LINE TO 11 COMP COOLING PUMP CHK	NF-39245	23	OPEN	C	ACT-BOTH		E	CS	
CC-5-2	CC	RETURN LINE TO 12 COMP COOLING PUMP CHK	NF-39245	23	OPEN	C	ACT-BOTH		E	CS	
CC-57-1	CC	11 REACT CLNT PUMP BRG CLG WTR RET VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-57-2	CC	12 REACT CLNT PUMP BRG CLG WTR RET VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-60-1	CC	11 RC PUMP BRG CLG WTR SUPPLY RELIEF	NF-39245	23	OPN/CLS	EXCLUDED	NOTE 3				
CC-60-2	CC	12 RC PUMP BRG CLG WTR SUPPLY RELIEF	NF-39245	23	OPN/CLS	EXCLUDED	NOTE 3				
CC-61-1	CC	EMERG SUPPLY TO 11/12 RCP BRG CLG CHK	NF-39245	23	OPN/CLS	C	ACT-BOTH		E	CS	
CC-61-2	CC	EMERG SUPPLY TO 11/12 RCP BRG CLG CHK	NF-39245	23	OPN/CLS	C	ACT-BOTH		E	CS	
CC-68-1	CC	11 RC PUMP BRG CLG SUPPLY LINE DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-68-2	CC	11 RC PUMP BRG CLG SUPPLY LINE VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-68-3	CC	11 RC PUMP BRG CLG RET VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-68-4	CC	11 RC PUMP BRG CLG RET DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-68-5	CC	12 RC PUMP BRG CLG SUPPLY DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-68-6	CC	12 RC PUMP BRG CLG SUPPLY VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-68-7	CC	12 RC PUMP BRG CLG RET VENT	NF-39245	23	CLOSE	EXCLUDED					
CC-68-8	CC	12 RC PUMP BRG CLG RET DRAIN	NF-39245	23	CLOSE	EXCLUDED					
CC-69-1	CC	11 RC PUMP BRG CLG WTR RELIEF	NF-39245	23	CLOSE	EXCLUDED	NOTE 3				
CC-69-2	CC	12 RC PUMP BRG CLG WTR RELIEF	NF-39245	23	CLOSE	EXCLUDED	NOTE 3				
CC-7-1	CC	12 RHR HX CC OUTLET	NF-39245	23	THROT	EXCLUDED					
CC-7-2	CC	11 RHR HX CC OUTLET	NF-39245	23	THROT	EXCLUDED					
CC-70-1	CC	32A PENETRATION LEAK TEST	NF-39245	23	CLOSE	EXCLUDED					
CC-70-2	CC	32B PENETRATION LEAK TEST	NF-39245	23	CLOSE	EXCLUDED					
CC-70-3	CC	39 PENETRATION LEAK TEST	NF-39245	23	CLOSE	EXCLUDED					
CC-8-1	CC	SFP RETURN CHK	NF-39245	23	OPEN	EXCLUDED	NOTE 13				
CC-8-2	CC	SFP RETURN CHK	NF-39245	23	OPEN	EXCLUDED	NOTE 13				
CC-9-1	CC	12 SPENT FUEL PIT HT EXCH INLET	NF-39245	23	OPEN	EXCLUDED					
CC-9-2	CC	12 SPENT FUEL PIT HT EXCH INLET	NF-39245	23	OPEN	EXCLUDED					
CV31245	CC	11 REACTOR CLNT PMP BRG CLNT OUTLET	NF-39245	23	OPEN	EXCLUDED					
CV31246	CC	12 REACTOR CLNT PMP BRG CLNT OUTLET	NF-39245	23	OPEN	EXCLUDED					
CV31252	CC	11 EXGS LTDOWN HT EXCH OUTLET	NF-39245	23	OPEN	B	ACT-CLOSE		E	Q	
MV32089	CC	11 REACT CLNT PUMP - BRG CLG WTR SUPPLY	NF-39245	23	OPEN	B	PAS-OPEN		PV	2Y	
MV32090	CC	11 REACT CLNT PUMP - BRG CLG WTR RETURN	NF-39245	23	OPEN	B	PAS-OPEN		PV	2Y	
MV32091	CC	12 REACT CLNT PUMP - BRG CLG WTR SUPPLY	NF-39245	23	OPEN	B	PAS-OPEN		PV	2Y	
MV32092	CC	12 REACT CLNT PUMP - BRG CLG WTR RETURN	NF-39245	23	OPEN	B	PAS-OPEN		PV	2Y	
MV32093	CC	11 RSDL HT EXGR COMP CLNT INLT MV	NF-39245	23	OPEN	B	ACT-BOTH	SP-1155	E	Q	
MV32094	CC	12 RSDL HT EXGR COMP CLNT INLT MV	NF-39245	23	OPEN	B	ACT-BOTH	SP-1155	E	Q	
MV32095	CC	11 EXCESS LET-DOWN HT EXCH SUPPLY	NF-39245	23	OPEN	B	ACT-CLOSE		E	Q	
MV32115	CC	121 & 122 SPENT FUEL PIT HT EXCHANGERS	NF-39245	23	BY SS	B	ACT-CLOSE	SP-1155	E	Q	
MV32117	CC	121 & 122 SPENT FUEL PIT HT EXCHANGERS	NF-39245	23	BY SS	B	ACT-CLOSE	SP-1155	E	Q	
MV32120	CC	COMP CLG WTR SUPPLY HEADER	NF-39245	23	OPEN	B	ACT-CLOSE	SP-1163	E	R	
MV32121	CC	COMP CLG WTR SUPPLY HEADER	NF-39245	23	OPEN	B	ACT-CLOSE	SP-1163	E	R	
MV32200	CC	11 COMP CLG PMP SUCT MV	NF-39245	23	OPEN	B	ACT-BOTH	SP-1155	E	Q	
MV32201	CC	12 COMP CLG PMP SUCT MV	NF-39245	23	OPEN	B	ACT-BOTH	SP-1155	E	Q	

Valve Number	Sys Description	P&ID	Code	Normal Position	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
NV32268	CC 11/12 RCP COMP CLG INLT ISOL MV A	NF 39245	23	OPEN	B	ACT-BOTH	SP-1163	E	R	
NV32267	CC 11/12 RCP COMP CLG INLT ISOL MV B	NF 39245	23	OPEN	B	ACT-BOTH	SP-1163	E	R	
CL-16-3	CL CLG WTR SUPPLY TO 121 CONT RM WTR CHILLER	NF 39603-3	14	OPEN	EXCLUDED					
CL-16-7	CL CLG RET FROM #121 CONT RM CHILLER COND	NF 39603-3	14	OPEN	EXCLUDED					
CL-17-15	CL CW RET FROM CHRG PUMPS MOTOR UNIT CLRS	NF 39603-2	14	OPEN	EXCLUDED					
CL-17-16	CL CW RET FROM AUX BLDG FAN COIL UNIT COOLERS	NF 39603-2	14	OPEN	EXCLUDED					
CL-19-16	CL SERV WTR CONN - TO HOSE STATION	NF 39216	14	CLOSE	EXCLUDED	NOTE 5				
CL-19-17	CL SERV WTR CONN - TO HOSE STATION	NF 39216	14	CLOSE	EXCLUDED	NOTE 5				
CL-19-28	CL 123 FILTERED WATER STRAINER - SUPPLY	NF 39216	14	OPEN	EXCLUDED					
CL-19-29	CL 123 FILTERED WATER STRAINER - SUPPLY	NF 39216	14	OPEN	EXCLUDED					
CL-20-21	CL 10 " RET FROM #11 & #13 CNTMT FAN COILS - DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-20-23	CL 10 " RET FROM #12 & #14 CNTMT FAN COILS - VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-20-24	CL 10 " RET FROM 12 & 14 CNTMT FAN COILS - DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-20-25	CL 20 " EMERG DUMP TO GRADE - DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-20-26	CL 10 " RET FROM UNIT 2 CNTMT FAN COILS - VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-20-27	CL 10 " RET FROM UNIT 2 CNTMT FAN COILS - DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-20-30	CL 11 COMP CLG HT EXCH - OUTLET LOCAL SAMPLE	NF 39216	14	CLOSE	EXCLUDED					
CL-20-31	CL 12 COMP CLG HT EXCH - OUTLET LOCAL SAMPLE	NF 39216	14	CLOSE	EXCLUDED					
CL-20-37	CL CLG WTR SUPPLY TO AUX FD PUMPS - DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-20-42	CL SERV WTR CONN-SCREEN HOUSE	NF 39216	14	OPEN	EXCLUDED	NOTE 5				
CL-20-43	CL 121 CONTR RM CHILLER COND-OUTLET - DRAIN	NF 39603-3	14	CLOSE	EXCLUDED					
CL-20-44	CL 122 CONTR RM CHILLER COND-OUTLET - DRAIN	NF 39603-3	14	CLOSE	EXCLUDED					
CL-20-46	CL RET FROM 122 CONTROL RM WTR CHILLER-VENT	NF 39603-3	14	CLOSE	EXCLUDED					
CL-20-47	CL SUPPLY TO 122 CONTROL RM WTR CHILLER-VENT	NF 39603-3	14	CLOSE	EXCLUDED					
CL-20-48	CL SUPPLY TO 121 CONTROL RM WTR CHILLER-VENT	NF 39603-3	14	CLOSE	EXCLUDED					
CL-20-49	CL RET FROM 121 CONTROL RM WTR CHILLER-VENT	NF 39603-3	14	CLOSE	EXCLUDED					
CL-21-10	CL 11 CNTMT FCU SUPPLY LINE VENT	NF 39216-4	14	CLOSE	EXCLUDED					
CL-21-11	CL 11 CNTMT FCU SUPPLY LINE DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-21-12	CL 11 CNTMT FCU SUPPLY LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-13	CL 11 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-14	CL 11 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-15	CL 11 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-16	CL 11 CNTMT FCU SUPPLY LINE DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-21-17	CL 11 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-18	CL 11 CNTMT FCU RETURN LINE DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-21-19	CL 12 CNTMT FCU SUPPLY LINE DRAIN	NF 39216-4	14	CLOSE	EXCLUDED					
CL-21-20	CL 12 CNTMT FCU SUPPLY LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-21	CL 12 CNTMT FCU SUPPLY LINE DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-21-22	CL 12 CNTMT FCU SUPPLY LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-23	CL 12 CNTMT FCU SUPPLY LINE DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-21-24	CL 12 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-25	CL 12 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-26	CL 12 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-27	CL 12 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-28	CL 12 CNTMT FCU RETURN LINE DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-21-29	CL 12 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-30	CL 13 CNTMT FCU SUPPLY LINE DRAIN	NF 39216	14	CLOSE	EXCLUDED					
CL-21-31	CL 13 CNTMT FCU SUPPLY LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-32	CL 13 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-33	CL 13 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					
CL-21-34	CL 13 CNTMT FCU RETURN LINE VENT	NF 39216	14	CLOSE	EXCLUDED					

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	V/V Category	V/V Function	Test Proc	Test Type	Test Freq	Relief Request
CL-21-35	CL	13 CNTMT FCU RETURN LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-36	CL	13 CNTMT FCU SUPPLY LINE DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-21-37	CL	14 CNTMT FCU SUPPLY LINE VENT	NF-39216-4	14	CLOSE	EXCLUDED					
CL-21-38	CL	14 CNTMT FCU SUPPLY LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-39	CL	14 CNTMT FCU SUPPLY LINE DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-21-40	CL	14 CNTMT FCU SUPPLY LINE DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-21-41	CL	14 CNTMT FCU RETURN LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-42	CL	14 CNTMT FCU RETURN LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-43	CL	14 CNTMT FCU RETURN LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-44	CL	14 CNTMT FCU RETURN LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-45	CL	14 CNTMT FCU RETURN LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-46	CL	12 CNTMT FCU SUPPLY LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-47	CL	11 CNTMT FCU SUPPLY LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-48	CL	24 IN CL HEADER VENT DOWNSTREAM OF VA 2CL-36-1	NF-39216	14	CLOSE	EXCLUDED					
CL-21-49	CL	24 IN CL HEADER VENT DOWNSTREAM OF VA CL-36-1	NF-39216	14	CLOSE	EXCLUDED					
CL-21-50	CL	6 IN RETURN FROM D-2 DIESEL GENLINE VENT	NF-39217	14	OPEN	EXCLUDED					
CL-21-51	CL	6" SUPPLY TO D-2 DIESEL GEN- DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-21-52	CL	10" SUPPLY TO 21 & 23 CNTMT FAN COILS- DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-21-53	CL	10" SUPPLY TO 22 & 24 CNTMT FAN COILS- VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-54	CL	10" SUPPLY TO 22 & 24 CNTMT FAN COILS- DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-21-55	CL	10" SUPPLY TO 11 & 13 CNTMT FAN COILS- VENT	NF-39216	14	CLOSE	EXCLUDED					
CL-21-56	CL	10" SUPPLY TO 11 & 13 CNTMT FAN COILS- DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-21-57	CL	SUPPLY TO 12 & 14 CNTMT FAN COILS- DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-21-58	CL	13 CONT FAN COIL SUPPLY VENT	NF-39216-3	14	CLOSE	EXCLUDED					
CL-21-60	CL	FROM VALVE - 11-22 TO STM GEN SAMPL COOLER	NF-39216	14	OPEN	EXCLUDED					
CL-21-71	CL	11 SGB EXCH OUTLET	NF-39216	14	OPEN	EXCLUDED					
CL-22-3	CL	ISOLA BETWEEN #11 & #13 FCU CROSS TIE	NF-39216	14	OPEN	EXCLUDED					
CL-22-1	CL	11 & 13 CONTAINMENT FAN COIL BY-PASS	NF-39216	14	OPEN	EXCLUDED					
CL-22-2	CL	12 & 14 CONTAINMENT FAN COIL BY-PASS	NF-39216	14	OPEN	EXCLUDED					
CL-22-3	CL	ISOLA BETWEEN 11 & 13 FCU CROSS TIE	NF-39216	14	OPEN	EXCLUDED					
CL-22-4	CL	ISOLA BETWEEN 12 & 14 FCU CROSS TIE	NF-39216	14	OPEN	EXCLUDED					
CL-22-5	CL	121 CNTRL RM CHILLER CONDSTR OUTLET VENT	NF-39603-3	14	CLOSE	EXCLUDED					
CL-23-1	CL	121 CNTRL RM CHILLER CONDSTR INLET DRAIN	NF-39603-3	14	CLOSE	EXCLUDED					
CL-23-2	CL	122 CONTROL RM CHILLER CONDSTR INLET DRAIN	NF-39603-3	14	CLOSE	EXCLUDED					
CL-25-1	CL	12 DCWP HX RELIEF	NF-39603-3	14	CLOSE	EXCLUDED	NOTE 3				
CL-36-1	CL	LOOP A CLG WTR SPLY HDR STOP	NF-39216	14	OPEN	EXCLUDED					
CL-37-1	CL	11 COOLING WATER STRAINER INLET	NF-39216	14	OPEN	EXCLUDED					
CL-37-2	CL	12 COOLING WATER STRAINER INLET	NF-39216	14	OPEN	EXCLUDED					
CL-37-3	CL	11 CLG WTR STRAINER OUTLET	NF-39216	14	OPEN	EXCLUDED					
CL-37-4	CL	12 CLG WTR STRAINER OUTLET	NF-39216	14	OPEN	EXCLUDED					
CL-39-1	CL	11 COOLING WATER PUMP DISCHARGE	NF-39216	14	OPEN	EXCLUDED					
CL-39-2	CL	12 COOLING WATER PUMP DISCHARGE	NF-39216	14	OPEN	EXCLUDED					
CL-39-3	CL	121 COOLING WATER PUMP DISCHARGE	NF-39216	14	OPEN	EXCLUDED					
CL-40-1	CL	11 COMP CLG HT EXGR CLG WTR RETURN	NF-39216	14	OPEN	EXCLUDED					
CL-40-2	CL	12 COMP CLG HT EXGR CLG WTR RETURN	NF-39216	14	OPEN	EXCLUDED					
CL-41-1	CL	D1 DSL GEN CLG WTR SPLY	NF-39216	14	OPEN	EXCLUDED					
CL-43-1	CL	11 COOLING WATER PUMP DISCHARGE	NF-39216	14	OPEN	C	ACT-CLOSE	SP-1100A	E	Q	
CL-43-2	CL	12 COOLING WATER PUMP DISCHARGE	NF-39216	14	CLOSE	C	ACT-BOTH	SP-1100A	E	Q	
CL-43-3	CL	121 COOLING WATER PUMP DISCHARGE	NF-39217	14	OPN/CLS	C	ACT-BOTH	SP-1240	E	Q	
CL-57-1	CL	COMP CLG HT EXCH 11 RELIEF	NF-39216	14	OPN/CLS	EXCLUDED	NOTE 3				
CL-57-2	CL	COMP CLG HEAT EXCH 12 RELIEF	NF-39216	14	OPN/CLS	EXCLUDED	NOTE 3				



Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	V/V Category	V/V Function	Test Proc	Test Type	Test Freq	Relief Request
CL-57-3	CL	11 CNTMT FCU RTN LINE RELIEF	NF-39216	14	OPN/CLS	EXCLUDED	NOTE 3				
CL-57-4	CL	12 CNTMT FCU RTN LINE RELIEF	NF-39216	14	OPN/CLS	EXCLUDED	NOTE 3				
CL-57-5	CL	13 CNTMT FCU RTN LINE RELIEF	NF-39216	14	OPN/CLS	EXCLUDED	NOTE 3				
CL-57-6	CL	14 CNTMT FCU RTN LINE RELIEF	NF-39216	14	OPN/CLS	EXCLUDED	NOTE 3				
CL-61-1	CL	121 SFGRD TRAVELING SCREEN-CLR WTR SUPPLY	NF-39216	14	OPEN	EXCLUDED					
CL-61-2	CL	122 SFGRD TRAVELING SCREEN-CLR WTR SUPPLY	NF-39216	14	OPEN	EXCLUDED					
CL-67-1	CL	CL MU TO EXP TK CHECK	NF-39216	14	OPN/CLS	EXCLUDED	NOTE 5				
CL-74-6	CL	OUTLET FROM 121 STM COND RET UNIT HT EXCH	NF-39216	14	OPEN	EXCLUDED					
CL-76-3	CL	CV-31769 BYPASS	NF-39603-3	28	CLOSE		ACT-OPEN	SP-1161	E	Q	
CL-76-4	CL	CV-31785 BYPASS	NF-39603-3	28	CLOSE	B	ACT-OPEN	SP-1161	E	Q	
CL-80-1	CL	24" CLG WTR HDR-VENT UPSTREAM OF MV-3215-9	NF-39216	14	CLOSE	EXCLUDED					
CL-80-13	CL	123 FILTERED WATER STRAINER BY-PASS	NF-39216	14	OPEN	EXCLUDED					
CL-80-14	CL	123 FILTERED WATER STRAINER BY-PASS	NF-39216	14	OPEN	EXCLUDED					
CL-80-2	CL	24" CL HDR-VENT UPSTREAM OF MV-3215-9 DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-80-3	CL	24" CL HDR-VENT UPSTREAM OF MV-3214-4	NF-39216	14	CLOSE	EXCLUDED					
CL-80-4	CL	24" CL HDR-VENT UPSTREAM OF MV-3214-4 DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CL-80-5	CL	12 CLG WTR PUMP GEAR COOLER INLET	NF-39216	14	OPEN	EXCLUDED					
CL-80-6	CL	12 CLG WTR PUMP GEAR COOLER OUTLET	NF-39216-1	14	OPEN	EXCLUDED					
CL-80-8	CL	11 & 13 CNTMT FAN COILS TO RADIATION MONITOR	NF-39216	14	OPEN	EXCLUDED					
CL-80-9	CL	12 & 14 CNTMT FAN COILS TO RADIATION MONITOR	NF-39216	14	OPEN	EXCLUDED					
CL-90-2	CL	CL TO 11/13 FCU CORROSION MON ISOL	NF-39216-3	14	OPEN	EXCLUDED					
CL-90-3	CL	CL TO 12/14 FCU CORROSION MON ISOL	NF-39216-3	14	OPEN	EXCLUDED					
CL-90-4	CL	CL TO D1 DSL GEN CORROSION MON ISOL	NF-39255-1	14	OPEN	EXCLUDED					
CL-90-5	CL	CL TO D2 DSL GEN CORROSION MON ISOL	NF-39255-1	14	OPEN	EXCLUDED					
CL-998-1	CL	SUPPLY TO BATTERY ROOM UNIT COOLERS	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CL-998-2	CL	SUPPLY TO AIR COMPRESSOR UNIT COOLER	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CL-998-3	CL	SUPPLY TO CHARGING PUMP MOTOR UNIT CLR	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CL-998-4	CL	SUPPLY TO CONT SPRAY PMP UNIT COOLER	NF-39216	14	OPEN	EXCLUDED					
CL-998-6	CL	SUPPLY TO CNTMT INTERNAL CLN UP FILTER	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CL-100-1	CL	11 FCU CLG WTR SUPPLY ISOLATION	NF-39216	14	OPEN	EXCLUDED					
CL-100-2	CL	12 FCU CLG WTR SUPPLY ISOLATION	NF-39216	14	OPEN	EXCLUDED					
CL-100-3	CL	13 FCU CLG WTR SUPPLY ISOLATION	NF-39216	14	OPEN	EXCLUDED					
CL-100-4	CL	14 FCU CLG WTR SUPPLY ISOLATION	NF-39216	14	OPEN	EXCLUDED					
CL-100-5	CL	11 & 13 FCU CL RTN ORIF UPSTREAM ISOLATION	NF-39216	14	OPEN	EXCLUDED					
CL-100-6	CL	12 & 14 FCU CL RTN ORIF UPSTREAM ISOLATION	NF-39216	14	OPEN	EXCLUDED					
CL-100-7	CL	11 & 13 FCU CL RTN ORIF DOWNSTREAM ISOLATION	NF-39216	14	OPEN	EXCLUDED					
CL-100-8	CL	12 & 14 FCU CL RTN ORIF DOWNSTREAM ISOLATION	NF-39216	14	OPEN	EXCLUDED					
CL-114-1	CL	11 & 12 CNTMT/AUX CHILLER CLG WTR SUPPLY	NF-39216	14	OPEN	EXCLUDED	NOTE 9				
CL-119-1	CL	11 STM GEN BLOWDOWN SPLY ISOL	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-1-1	CL	SUPPLY TO AUX FD PUMPS	NF-39216	14	OPEN	EXCLUDED					
CW-1-2	CL	SUPPLY TO AUX FD PUMPS	NF-39216	14	OPEN	EXCLUDED					
CW-12-1	CL	11 CNTMT FCU CLG WTR INLET CHECK	NF-39216-4	14	OPN/CLS	C	ACT-OPEN		E	Q	
CW-12-2	CL	13 CNTMT FCU CLG WTR INLET CHECK	NF-39216-4	14	OPN/CLS	C	ACT-OPEN		E	Q	
CW-12-3	CL	12 CNTMT FCU CLG WTR INLET CHECK	NF-39216-4	14	OPN/CLS	C	ACT-OPEN		E	Q	
CW-12-4	CL	14 CNTMT FCU CLG WTR INLET CHECK	NF-39216-4	14	OPN/CLS	C	ACT-OPEN		E	Q	
CW-15-1	CL	TO 12 CW PUMP DIESEL ENGINE COOLING	NF-39216	14	OPEN	EXCLUDED					
CW-15-4	CL	SUPPLY TO SPRINKLER SYSTEM	NF-39255-1	14	CLOSE	EXCLUDED					
CW-15-5	CL	SUPPLY TO SPRINKLER SYSTEM	NF-39255-1	14	CLOSE	EXCLUDED					
CW-17-1	CL	TB SPRINKLER SYS COOLING WTR SUPPLY	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-17-10	CL	CL SPLY TO AUX BLDG VENT EQUIP FRM LOOP B	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-17-10	CL	CL SPLY TO CHLORINE SYSTEM LOOP A	NF-39216	14	OPEN	EXCLUDED	NOTE 5				

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CW-17-11	CL	FIRE PROT SUPPLY AT TRAV SCREENS	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-17-12	CL	FIRE PROT SUPPLY AT TRAV SCREENS	NF-39216	14	CLOSE	EXCLUDED	NOTE 5				
CW-17-13	CL	CW SUPPLY TO FIRE PROT SYST	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-17-14	CL	CW SUPPLY TO FIRE PROT SYST	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-17-2	CL	SUPPLY TO CONTROL RM AIR CONDITIONER	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-17-3	CL	CLG WTR TO AUX BLDG UNIT CLRS	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-17-4	CL	CL SPLY TO AUX BLDG VENT EQUIP FROM LOOP A	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-17-5	CL	LOOP A SCREENHOUSE CL SUPPLY	NF-39216	14	OPEN	EXCLUDED					
CW-17-6	CL	SCRNHSE CLG WTR HEADER X-OVER VALVE A	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-17-7	CL	SCRNHSE CLG WTR HEADER X-OVER VALVE B	NF-39216	14	OPEN	EXCLUDED					
CW-17-8	CL	LOOP B SCREENHOUSE CLG WTR SUPPLY	NF-39216	14	CLOSE	EXCLUDED					
CW-17-9	CL	CLG WTR SPLY TO CHLORINE SYSTEM LOOP B	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-19-1	CL	11 COOLING WATER STRAINER - DRAIN	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-19-10	CL	11/12 AUX FW PUMP CLG WTR SUPPLY LINE DRAIN	NF-39222	14	OPEN	EXCLUDED					
CW-19-16	CL	11 AUX FW PUMP CLG WTR SUPPLY LINE FLUSH	NF-39216-2	14	CLOSE	EXCLUDED	NOTE 5				
CW-19-17	CL	12 AUX FW PUMP CLG WTR SUPPLY LINE FLUSH	NF-39217	14	CLOSE	EXCLUDED	NOTE 5				
CW-19-3	CL	TO RESIDUAL PIT SUMP PUMP TEST LINE	NF-39216	14	CLOSE	EXCLUDED	NOTE 5				
CW-19-6	CL	SUPPLY TO SA COMPR AFTERCOOLER SYS UNIT 1	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-19-7	CL	SUPPLY TO SA COMPR AFTERCOOLER SYS UNIT 2	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-19-8	CL	SUPPLY TO CIRC WTR PUMP SEALS	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-19-9	CL	SUPPLY TO CIRC WTR PUMP SEALS	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-20-1	CL	11 COMP CLG HT EXCH VENT	NF-39216	14	CLOSE	EXCLUDED					
CW-20-11	CL	D1 CLG WTR RETURN DRAIN	NF-39232	14	CLOSE	EXCLUDED					
CW-20-12	CL	CLG WTR SUPPLY - DIESEL GEN D-1 (LINE DRAIN)	NF-39232	14	CLOSE	EXCLUDED					
CW-20-13	CL	D-2 DIESEL GEN SUPPLY LINE DRAIN	NF-39232	14	CLOSE	EXCLUDED					
CW-20-14	CL	D-2 DIESEL GEN RETURN LINE DRAIN	NF-39232	14	CLOSE	EXCLUDED					
CW-20-3	CL	11 CC HX CLG WTR INLET LINE DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CW-20-4	CL	12 CC HX CLG WTR INLET LINE DRAIN	NF-39216	14	CLOSE	EXCLUDED					
CW-20-7	CL	12 COMP CLG HT EXCH VENT	NF-39216	14	CLOSE	EXCLUDED					
CW-20-9	CL	AFW FLUSHING RETURN LINE DRAIN	NF-39216-2	14	CLOSE	EXCLUDED					
CW-21-1	CL	11 CONTAINMENT FAN COIL OUTLET LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CW-21-2	CL	13 CONTAINMENT FAN COIL OUTLET LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CW-21-3	CL	14 CONTAINMENT FAN COIL OUTLET LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CW-21-4	CL	12 CONTAINMENT FAN COIL OUTLET LINE VENT	NF-39216	14	CLOSE	EXCLUDED					
CW-21-57	CL	21 CLG WATER STRAINER (VENT)	NF-39216	14	CLOSE	EXCLUDED					
CW-5-1	CL	D2 DSL GEN CLG WTR SPLY	NF-39216	14	OPEN	EXCLUDED					
CW-6-1	CL	12/14 CNTMT FAN COILS CLG WTR SUPPLY	NF-39216	14	OPEN	EXCLUDED					
CW-6-2	CL	11/13 CNTMT FAN COILS CLG WTR SUPPLY	NF-39216	14	OPEN	EXCLUDED					
CW-60-1	CL	RETURN FROM 11 & 13 CONTAINMENT FAN COILS	NF-39216	14	OPEN	EXCLUDED					
CW-60-2	CL	RETURN FROM 12 & 14 CONTAINMENT FAN COILS	NF-39216	14	OPEN	EXCLUDED					
CW-62-1	CL	D-1 DIESEL GENERATOR SUPPLY	NF-39232	14	OPEN	EXCLUDED					
CW-62-2	CL	D-1 DIESEL GENERATOR RETURN	NF-39232	14	OPEN	EXCLUDED					
CW-62-3	CL	D-2 DIESEL GENERATOR SUPPLY	NF-39232	14	OPEN	EXCLUDED					
CW-62-4	CL	D-2 DIESEL GENERATOR RETURN	NF-39232	14	OPEN	EXCLUDED					
CW-64-5	CL	11 CLG WTR STRAINER (VENT)	NF-39216	14	CLOSE	EXCLUDED					
CW-64-6	CL	12 CLG WTR STRAINER (VENT)	NF-39216	14	CLOSE	EXCLUDED					
CW-70-2	CL	11 SGB HT EXGR CLG WTR SUPPLY	NF-39216	14	OPEN	EXCLUDED	NOTE 5				
CW-71-3	CL	11 SGB HT EXCH RETURN LINE	NF-39216	14	OPEN	EXCLUDED					
CW-75-1	CL	12 CLG WTR PUMP JACKET WTR HT EXCH INLET	NF-39216	14	OPEN	EXCLUDED					
CW-76-1	CL	12 CLG WTR PUMP JACKET WTR HT EXCH OUTLET	NF-39216	14	OPEN	EXCLUDED					
CV313B1	CL	11 COMP CLG HT EXCH CLG WTR RETURN	NF-39216	14	OPEN	B	ACT-OPEN		E	CS	

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	V/V Category	V/V Function	Test Proc	Test Type	Test Freq	Relief Request
CV31411	CL	12 COMP CLG HT EXCH CLG WTR RETURN	NF-39216	14	OPEN	B	ACT-OPEN	SP-1106A	E	CS	
CV31423	CL	12 DD CLP JACKET CLT OUT	NF-39216	14	CLOSE	B	ACT-OPEN		E	Q	
CV31652	CL	11 CLG WTR STRNR BK WASH	NF-39216-1	14	N/A	EXCLUDED	NOTE 6				
CV31653	CL	12 CLG WTR STRNR BK WASH	NF-39216-1	14	N/A	EXCLUDED	NOTE 6				
CV39201	CL	11/3FCU CLG WATER RTN ORIFICE B.P VLV	NF-39216	14	CLOSE	B	ACT-OPEN	SP-1158	E	Q	
CV39203	CL	12/14FCU CLG WATER RTN ORIFICE B.P VLV	NF-39216	14	CLOSE	B	ACT-OPEN	SP-1158	E	Q	
MV32025	CL	11 TD AFW PUMP SUCT CLG WTR SUPPLY MV	NF-39216	14	CLOSE	B	ACT-OPEN	SP-1193	E	CS	
MV32027	CL	12 MD AFW PUMP SUCT CLG WTR SUPPLY MV	NF-39216	14	CLOSE	B	ACT-OPEN	SP-1193	E	CS	
MV32031	CL	1 TURB BLDG CLG WTR HDR MV	NF-39216	14	OPEN	B	ACT-CLOSE	SP-1100	E	Q	
MV32036	CL	COOLING WTR PUMPS-CROSS-OVER	NF-39216	14	OPEN	B	ACT-CLOSE	SP-1158	E	Q	
MV32037	CL	COOLING WTR PUMPS-CROSS-OVER	NF-39216	14	OPEN	B	ACT-CLOSE	SP-1158	E	Q	
MV32038	CL	20 IN EMERGENCY DUMP TO GRADE	NF-39216	14	CLOSE	B	ACT-OPEN	SP-1158	E	Q	
MV32132	CL	11 CONTAINMENT FAN COIL OUTLET	NF-39216-4	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32133	CL	11 CONTAINMENT FAN COIL OUTLET	NF-39216-3	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32135	CL	12 CONTAINMENT FAN COIL OUTLET	NF-39216-4	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32136	CL	12 CONTAINMENT FAN COIL OUTLET	NF-39216-3	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32138	CL	13 CONTAINMENT FAN COIL OUTLET	NF-39216-4	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32139	CL	13 CONTAINMENT FAN COIL OUTLET	NF-39216-3	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32141	CL	14 CONTAINMENT FAN COIL OUTLET	NF-39216-4	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32142	CL	14 CONTAINMENT FAN COIL OUTLET	NF-39216-3	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32144	CL	LOOP A/B CLG WTR HDR XOVR MV A	NF-39216	14	OPEN	B	ACT-CLOSE	SP-1158	E	Q	
MV32145	CL	11 COMP CLG HT EXGR CLG WTR MV	NF-39216	14	BY SS	B	ACT-OPEN	SP-1155	E	Q	
MV32146	CL	12 COMP CLG HT EXGR CLG WTR MV	NF-39216	14	BY SS	B	ACT-OPEN	SP-1155	E	Q	
MV32322	CL	24 " CLG WTR RETURN UNIT 1	NF-39216	14	OPEN	B	ACT-OPEN	SP-1158	E	Q	
MV32332	CL	24 " CLG WTR RETURN UNIT 1	NF-39216	14	OPEN	B	PAS-OPEN		PV	2Y	
MV32371	CL	11/12 TURB OIL CLRS CLG WTR BYPS SPLY MV	NF-39216	14	CLOSE	EXCLUDED	NOTE 5				
MV32377	CL	11 CONTAINMENT FAN COIL INLET	NF-39216	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32378	CL	13 CONTAINMENT FAN COIL INLET	NF-39216	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32379	CL	12 CONTAINMENT FAN COIL INLET	NF-39216	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
MV32380	CL	14 CONTAINMENT FAN COIL INLET	NF-39216	14	OPEN	B	ACT-BOTH	SP-1158	E	Q	
SV33133	CL	CL TO 121 SFGRDS TRVLNG SCRN	NF-39216	14	CLOSE	B	PAS-CLOSE		PV	2Y	
SV33134	CL	CL TO 122 SFGRDS TRVLNG SCRN	NF-39216	14	CLOSE	B	PAS-CLOSE		PV	2Y	
SV33464	CL	12 DD CLG WTR PMP AIR MTR A (RIGHT SIDE)	NF-39232	14	OPEN	EXCLUDED					
SV33465	CL	12 DD CLG WTR PMP AIR MTR B (LEFT SIDE)	NF-39232	14	OPEN	EXCLUDED					
CS-9	CS	11 CONT SPRAY PUMP DISCH	NF-39237	19	OPEN	EXCLUDED					
CS-10	CS	12 CONT SPRAY PUMP DISCH	NF-39237	19	OPEN	EXCLUDED					
CS-11	CS	11 CNTMT SPRAY PMP TEST LINE ISOLATION	NF-39237	19	CLOSE	EXCLUDED	NOTE 8				
CS-12	CS	12 CNTMT SPRAY PMP TEST LINE ISOLATION	NF-39237	19	CLOSE	EXCLUDED	NOTE 8				
CS-13	CS	AIR TEST CONN	NF-39237	19	CLOSE	EXCLUDED					
CS-14	CS	AIR TEST CONN	NF-39237	19	CLOSE	EXCLUDED					
CS-15	CS	11 REF WTR STOR TK	NF-39237	19	OPEN	EXCLUDED					
CS-16	CS	11 CONT SPRAY PUMP SUCT CHK	NF-39237	19	OPN/CLS	C	ACT-BOTH		E	R	
CS-17	CS	12 CONT SPRAY PUMP SUCT CHK	NF-39237	19	OPN/CLS	C	ACT-BOTH		E	R	
CS-18	CS	11 CONT SPRAY PUMP DISCH CHK VLV	NF-39237	19	OPN/CLS	A, C	ACT-BOTH		E	R	
CS-19	CS	12 CONT SPRAY PUMP DISCH CHK VLV	NF-39237	19	OPN/CLS	A, C	ACT-BOTH	SP-1072.298	LT	R	
CS-22-1	CS	11 CONT SPRAY PUMP SUCT RELIEF	NF-39237	19	OPN/CLS	C	ACT-BOTH	SP-1072.29A	LT	R	
CS-22-2	CS	12 CONT SPRAY PUMP SUCT RELIEF	NF-39237	19	OPN/CLS	C	ACT-BOTH	P3120.14-11A	SP	10Y	
CS-23-1	CS	11 CNTMT SPRAY PUMP MECHANICAL SEAL VENT	NF-39237	19	CLOSE	EXCLUDED		P3120.14-12A	SP	10Y	
CS-23-2	CS	12 CNTMT SPRAY PUMP MECHANICAL SEAL VENT	NF-39237	19	CLOSE	EXCLUDED					

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CS-24-1	CS	11 CS PUMP RECIRC TO RWST	NF-39237	19	CLOSE	EXCLUDED					
CS-24-2	CS	12 CS PUMP RECIRC TO RWST	NF-39237	19	CLOSE	EXCLUDED					
CS-25-1	CS	11 CS PUMP DISCH TEST	NF-39237	19	CLOSE	EXCLUDED					
CS-25-2	CS	12 CS PUMP DISCH TEST	NF-39237	19	CLOSE	EXCLUDED					
CS-30-10	CS	11 CONT SPRAY PUMP DISCH	NF-39237	19	CLOSE	EXCLUDED					
CS-30-5	CS	11 & 12 CONT SPRAY PUMP SUCT-VENT	NF-39237	19	CLOSE	EXCLUDED					
CS-30-6	CS	11 CONT SPRAY PUMP-DRAIN	NF-39237	19	CLOSE	EXCLUDED					
CS-30-7	CS	12 CONT SPRAY PUMP-DRAIN	NF-39237	19	CLOSE	EXCLUDED					
CS-30-8	CS	RW STOR TK 11 TO CHARGING PUMPS-DRAIN	NF-39237	19	CLOSE	EXCLUDED					
CS-30-9	CS	12 CONT SPRAY PUMP DISCH	NF-39237	19	CLOSE	EXCLUDED					
CS-31-1	CS	MV-32096 STEM LEAK-OFF	NF-39237	19	OPEN	EXCLUDED					
CS-31-2	CS	MV-32097 STEM LEAK-OFF	NF-39237	19	OPEN	EXCLUDED					
CS-32-1	CS	11 CS PUMP SUCT SPRAY ADD RETURN	NF-39237	19	OPEN	EXCLUDED					
CS-32-2	CS	11 CS PUMP SUCT SPRAY ADD RETURN	NF-39237	19	OPEN	EXCLUDED					
CS-32-3	CS	12 CS PUMP SUCT SPRAY ADD RETURN	NF-39237	19	OPEN	EXCLUDED					
CS-32-4	CS	12 CS PUMP SUCT SPRAY ADD RETURN	NF-39237	19	OPEN	EXCLUDED					
SF-18-1	CS	11 REFUELING WTR STOR TANK	NF-39237	19	CLOSE	EXCLUDED					
MV32096	CS	11 CONT SPRAY PUMP SUCT	NF-39237	19	CLOSE	B	ACT-OPEN	SP-1137	E	R	
MV32097	CS	12 CONT SPRAY PUMP SUCT	NF-39237	19	CLOSE	B	ACT-OPEN	SP-1137	E	R	
MV32098	CS	11 CONT SPRAY PUMP SUCT	NF-39237	19	OPEN	B	ACT-BOTH	SP-1137	E	R	
MV32099	CS	12 CONT SPRAY PUMP SUCT	NF-39237	19	OPEN	B	ACT-BOTH	SP-1137	E	R	
MV32103	CS	11 CONT SPRAY PUMP DISCH	NF-39237	19	CLOSE	A	ACT-BOTH	SP-1241/1137	E	CS	
								SP-1072.29B	LT	R	
MV32105	CS	12 CONT SPRAY PUMP DISCH	NF-39237	19	CLOSE	A	ACT-BOTH	SP-1241/1137	E	CS	
								SP-1072.29A	LT	R	
F-8-1	FW	FEEDWATER TO #11 STEAM GENERATOR CHK	NF-39222	16	OPEN	C	ACT-CLOSE		E	CS	
F-8-2	FW	FEEDWATER TO #12 STEAM GENERATOR CHK	NF-39222	16	OPEN	C	ACT-CLOSE		E	CS	
F-20-1	FW	16 " FW LINE DRAIN DOWNSTREAM OF MV-32024	NF-39222	16	CLOSE	EXCLUDED					
F-20-2	FW	16 " FW LINE DRAIN DOWNSTREAM OF MV-32023	NF-39222	16	CLOSE	EXCLUDED					
F-20-3	FW	11 S/G FW LINE VENT	NF-39222	16	CLOSE	EXCLUDED					
F-20-4	FW	12 S/G FW LINE VENT	NF-39222	16	CLOSE	EXCLUDED					
MV32023	FW	FDWTR TO #11 STM GEN	NF-39222	16	OPEN	B	ACT-CLOSE		E	CS	
MV32024	FW	FDWTR TO #12 STM GEN	NF-39222	16	OPEN	B	ACT-CLOSE		E	CS	
HC-1-1	HC	FROM 11 DOME RECIRC FAN TO ANNULUS & GA	NF-39251	25	OPEN	EXCLUDED					
HC-1-2	HC	FROM 14 DOME RECIRC FAN TO ANNULUS & GA	NF-39251	25	OPEN	EXCLUDED					
HC-1-3	HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	CLOSE	B	ACT-OPEN	SP-1157	E	CS	
HC-1-4	HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	CLOSE	B	ACT-OPEN	SP-1157	E	CS	
HC-1-5	HC	EMERGENCY AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	CLOSE	B	ACT-OPEN	SP-1157	E	CS	
HC-1-6	HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	CLOSE	B	ACT-OPEN	SP-1157	E	CS	
HC-2-1	HC	INST & EMERG AIR TO INSIDE CNTMT VESSEL CK	NF-39251	25	OPN/CLS	A, C	ACT-BOTH		E	CS	
								SP-1072.50	LT	R	
HC-2-2	HC	INST & EMERG AIR TO INSIDE CNTMT VESSEL CK	NF-39251	25	OPN/CLS	A, C	ACT-BOTH		E	CS	
								SP-1072.42A	LT	R	
HC-5-5	HC	UNIT 1 INST AIR TO CNTNMNT VESSEL - TEST	NF-39251	25	CLOSE	EXCLUDED					
HC-5-6	HC	UNIT 1 INST AIR TO CNTNMNT VESSEL - TEST	NF-39251	25	CLOSE	EXCLUDED					
CV31923	HC	POST LOCA TO FI ISOL	NF-39251	25	CLOSE	A	ACT-BOTH	SP-1252	E	Q	
								SP-1072.50	LT	R	
CV31925	HC	POST LOCA TO GA ISOL	NF-39251	25	CLOSE	A	ACT-BOTH	SP-1252	E	Q	
								SP-1072.50	LT	R	
CV31927	HC	POST LOCA TO GA ISOL	NF-39251	25	CLOSE	A	ACT-BOTH	SP-1252	E	Q	
								SP-1072.42A	LT	R	



Valve Number	Sys	Description	P&ID	Code Dwg	Normal Position	V/V Category	V/V Function	Test Proc	Test Type	Test Freq	Relief Request
CV31979	HC	POST LOCA TO HI ISOL	NF 39251	25	CLOSE	A	ACT-BOTH	SP-1252	E	Q	
MV32271	HC	POST LOCA VENT ISOL	NF 39251	25	CLOSE	A	ACT-BOTH	SP-1252	LT	R	
MV32273	HC	POST LOCA VENT ISOL	NF 39251	25	CLOSE	A	ACT-BOTH	SP-1072 50	LT	R	
MV32274	HC	POST LOCA SUPPLY ISOL	NF 39251	25	CLOSE	A	ACT-BOTH	SP-1252	E	Q	
MV32276	HC	POST LOCA SUPPLY ISOL	NF 39251	25	CLOSE	A	ACT-BOTH	SP-1072 50	LT	R	
SV33390	HC	11 POST LOCA H2 CNTMT VENT	NF 39251	25	C/N/C/S	EXCLUDED		SP-1072 42A	LT	R	
SV33991	HC	12 POST LOCA H2 CNTMT VENT	NF 39251	25	OPN/C/S	EXCLUDED		SP-1252	E	Q	
MS 20-4	MS	11 AUX FOWTR PUMP - EXH HD DRAIN	NF 39218	15	THROT	EXCLUDED		SP-1072 50	LT	R	
MS 20-7	MS	ROOT VALVE FOR PT-17003	NF 39218	15	OPEN	EXCLUDED		SP-1252	E	Q	
MS 22-3	MS	MS SUPPLY TO #11 AFWP TURB HIGH POINT VENT	NF 39218	15	OPEN	EXCLUDED		SP-1072 42A	LT	R	
MS 24-1	MS	MS SUPPLY TO #11 AFWP TURB HIGH POINT VENT	NF 39218	15	OPEN	EXCLUDED		SP-1252	E	Q	
MS 4-1	MS	STM GEN 21 RELIEF UPSTREAM OF CV 31084	NF 39218	15	OPEN	EXCLUDED		SP-1072 50	LT	R	
MS 4-2	MS	STM GEN 22 RELIEF UPSTREAM OF CV 31089	NF 39218	15	OPEN	EXCLUDED		SP-1252	E	Q	
RS 15-1	MS	FROM #12 STM GEN TO #11 AUX FOWTR PUMP CHK	NF 39218	15	OPEN	C	ACT-BOTH	SP-1072 42A	LT	R	
RS 15-2	MS	FROM #11 STM GEN TO #11 AUX FOWTR PUMP CHK	NF 39218	15	OPEN	C	ACT-BOTH		E	CS	
RS 18-2	MS	11 SAFETY VALVE MANIFOLD VENT & PURGE	NF 39218	15	CLOSE	EXCLUDED			E	CS	
RS 18-4	MS	12 SAFETY VALVE MANIFOLD VENT & PURGE	NF 39218	15	CLOSE	EXCLUDED					
RS 18-6	MS	11 STM GEN OUTLET LINE VENT	NF 39218	15	CLOSE	EXCLUDED					
RS 18-8	MS	12 STM GEN OUTLET LINE VENT	NF 39218	15	CLOSE	EXCLUDED					
RS 19-1	MS	STM GEN 11 OUTLET CHECK	NF 39218	15	OPEN	C	ACT-CLOSE		E	CS	
RS 19-2	MS	STM GEN 12 OUTLET CHECK	NF 39218	15	OPEN	C	ACT-CLOSE		E	CS	
RS 21-1	MS	11 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 21-10	MS	12 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 21-2	MS	11 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 21-3	MS	11 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 21-4	MS	11 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 21-5	MS	11 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 21-6	MS	12 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 21-7	MS	11 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 21-8	MS	12 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 21-9	MS	11 STM RELIEF HDR	NF 39218	15	CLOSE	C	ACT-BOTH	P3120-52-1	SP	10Y	
RS 4-1	MS	STM GEN 15 RELIEF UPSTREAM OF CV-31084	NF 39218	15	OPEN	EXCLUDED					
RS 4-2	MS	STM GEN 16 RELIEF UPSTREAM OF CV-31089	NF 39218	15	OPEN	EXCLUDED					
CV31084	MS	11 STM GEN MN STM SET RLV TO ATMOS	NF 39218	15	CLOSE	EXCLUDED					
CV31089	MS	12 STM GEN MN STM SET RLV TO ATMOS	NF 39218	15	CLOSE	EXCLUDED					
CV31050	MS	11 LOOP A MN STM HDR ISOL	NF 39218	15	OPEN	B	ACT-CLOSE	SP-1099	E	CS	
CV31099	MS	12 LOOP B MN STM HDR ISOL	NF 39218	15	OPEN	B	ACT-CLOSE	SP-1099	E	CS	
CV31998	MS	11 TO AFWP MN STM SUPPLY	NF 39218	15	OPEN	B	ACT-OPEN	SP-1102	E	Q	
MV32016	MS	LOOP A MN STM TO 11 TO AFWP MV	NF 39218	15	OPEN	B	PAS-OPEN		PV	2Y	
MV32017	MS	LOOP B MN STM TO 11 TO AFWP MV	NF 39218	15	OPEN	B	PAS-OPEN		PV	2Y	
MV32045	MS	1 LOOP A MN STM HDR EOLZG MV	NF 39218	15	CLOSE	B	PAS-CLOSE		PV	2Y	
MV32047	MS	1 LOOP B MN STM HDR EOLZG MV	NF 39218	15	CLOSE	B	PAS-CLOSE		PV	2Y	
RIPT DISC	MS	AF EXH	NF 39218	15	N/A	D	PASSIVE		SP	5Y	
RC-1-1	RC	LOOP A TO REACTOR COOLANT DRAIN TK	HIAW 1-7		CLOSE	EXCLUDED					
RC-1-10	RC	LOOP A TO LETDOWN LINE	HIAW 1-7	2	OPEN	EXCLUDED					
RC-1-11	RC	LOOP A TO LETDOWN LINE	HIAW 1-7	2	OPEN	EXCLUDED					

Valve Number	Sys	Description	P&ID	Code	Normal	V/V Category	V/V Function	Test Proc	Test Type	Test Freq	Relief Request
RC-1-12	RC	LOOP B HOT LEG RTD MANIFOLD SUPPLY	HIAW 1-7	2	OPEN	EXCLUDED					
RC-1-13	RC	LOOP B TO LETDOWN LINE	HIAW 1-7	2	OPEN	EXCLUDED					
RC-1-14	RC	LOOP B TO LETDOWN LINE	HIAW 1-7	2	THROT	EXCLUDED					
RC-1-15	RC	LOOP B TO LETDOWN LINE	HIAW 1-7	2	THROT	EXCLUDED					
RC-1-16	RC	LOOP B COLD LEG RTD MANIFOLD - INLET	HIAW 1-7	2	OPEN	EXCLUDED					
RC-1-17	RC	LOOP B COLD LEG RTD MANIFOLD - SUPPLY	HIAW 1-7	2	OPEN	EXCLUDED					
RC-1-18	RC	CHARGING LINE ISOLATION	HIAW 1-7	2	OPEN	EXCLUDED					
RC-1-2	RC	LOOP A TO REACTOR COOLANT DRAIN TK	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-1-3	RC	LOOP B TO WDS	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-1-4	RC	LOOP B TO WDS	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-1-5	RC	LOOP B TO LETDOWN LINE	HIAW 1-7	2	OPEN	EXCLUDED					
RC-1-6	RC	LOOP A TO LETDOWN LINE	HIAW 1-7	2	THROT	EXCLUDED					
RC-1-7	RC	LOOP A TO LETDOWN LINE	HIAW 1-7	2	OPEN	EXCLUDED					
RC-1-8	RC	LOOP A TO LETDOWN LINE	HIAW 1-7	2	OPEN	EXCLUDED					
RC-1-9	RC	LOOP A TO LETDOWN LINE	HIAW 1-7	2	THROT	EXCLUDED					
RC-10-1	RC	PRESSURIZER RELIEF VALVE	HIAW 1-7	2	CLOSE	C	ACT-BOTH	P3120-57-1A	SP	5Y	
RC-10-2	RC	PRESSURIZER RELIEF VALVE	HIAW 1-7	2	CLOSE	C	ACT-BOTH	P3120-57-1B	SP	5Y	
RC-13-1	RC	REACTOR GAS VENT SYS TO 1PT-729	HIAW 1-7	2	OPEN	EXCLUDED					
RC-13-2	RC	REACTOR GAS VENT SYS TO 1PT-729	HIAW 1-7	2	OPEN	EXCLUDED					
RC-14-3	RC	REACT GAS VENT SYS ISOL VALVE HEADER DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-16-1	RC	RVLIS LOOP A HOT LEG ISOLATION FOR RC-17-2	HIAW 1-7	2	OPEN	EXCLUDED					
RC-16-2	RC	RVLIS LOOP B HOT LEG ISOLATION FOR RC-17-4	HIAW 1-7	2	OPEN	EXCLUDED					
RC-17-1	RC	RVLIS SEAL TABLE CONNECTION ISOLATION	HIAW 1-7	2	OPEN	EXCLUDED					
RC-17-2	RC	RVLIS LOOP A HOT LEG CONNECTION ISOLATION	HIAW 1-7	2	OPEN	EXCLUDED					
RC-17-3	RC	RVLIS REACTOR HEAD CONNECTION ISOLATION	HIAW 1-7	2	OPEN	EXCLUDED					
RC-17-4	RC	RVLIS LOOP B HOT LEG CONNECTION ISOLATION	HIAW 1-7	2	OPEN	EXCLUDED					
RC-18-1	RC	RCS LOOP A HOT LEG DRAIN TO RCOT	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-18-2	RC	RCS LOOP A HOT LEG DRAIN TO RCOT	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-18-5	RC	RCS LOOP A PRZR SPRAY MANUAL ISOL	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-19-1	RC	LOOP A PRZR SPRAY TO RCOT SHUTDOWN PURIF	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-19-2	RC	LOOP A PRZR SPRAY TO RCOT SHUTDOWN PURIF	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-2-1	RC	LOOP A TO LETDOWN LINE	HIAW 1-7	2	OPEN	EXCLUDED					
RC-2-2	RC	LOOP B TO LETDOWN LINE	HIAW 1-7	2	OPEN	EXCLUDED					
RC-3-1	RC	REACTOR MAKEUP WATER TO PRZR RELIEF TANK	HIAW 1-7	2	BY / S	A, C	ACT-CLOSE		E	CS	
RC-5-1	RC	NITROGEN SUPPLY LINE TO PRZR RELIEF TANK	HIAW 1-7	2	BY / S	A, C	ACT-CLOSE	SP-1072.45	LT	R	
RC-6-1	RC	NITROGEN SUPPLY LINE TO PRZR RELIEF TANK	HIAW 1-7	2	OPN/CLS	EXCLUDED		SP-1072.2	LT	R	
RC-7-1	RC	LOOP B TO PRZR CV-31225 BY-PASS	HIAW 1-7	2	THROT	EXCLUDED					
RC-7-2	RC	LOOP A TO PRZR CV-31224 BY-PASS	HIAW 1-7	2	THROT	EXCLUDED					
RC-8-1	RC	HOSE CONN FR REACT CLNT DRAIN TANK HOR	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-10	RC	PRESS INLET - LINE DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-11	RC	LOOP B TO LETDOWN LINE - DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-12	RC	LOOP B TO LETDOWN LINE - VENT	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-13	RC	SAME LINE - VENT PRESSURIZER OUTLET	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-14	RC	LOOP SEAL AT PRESSURIZER REL VAL - DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-15	RC	LOOP SEAL AT PRESSURIZER REL VAL - DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-16	RC	AUX SPRAY TO PRESSURIZER INLET LINE - VENT	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-19	RC	AUX SPRAY TO PRESSURIZER INLET LINE - DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-2	RC	EXCESS LETDOWN LINE VENT	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-21	RC	DRAIN - DOWNSTREAM OF RTD MANIFOLD LOOP A	HIAW 1-7	2	CLOSE	EXCLUDED					

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
RC-8-22	RC	VENT - UPSTREAM OF RTD MANIFOLD LOOP A	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-23	RC	DRAIN - DOWNSTREAM OF RTD MANIFOLD LOOP A	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-24	RC	VENT - UPSTREAM OF RTD MANIFOLD LOOP A	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-25	RC	VENT - UPSTREAM OF RTD MANIFOLD LOOP B	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-26	RC	DRAIN - DOWNSTREAM OF RTD MANIFOLD LOOP B	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-27	RC	DRAIN - DOWNSTREAM OF RTD MANIFOLD LOOP B	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-28	RC	VENT - UPSTREAM OF RTD MANIFOLD LOOP B	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-3	RC	EXCESS LETDOWN LINE (CVCS) DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-31	RC	REACTOR HEAD VENT FLUSHING VALVE	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-32	RC	PRESSURIZER VENT FLUSHING VALVE	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-33	RC	RX HEAD VENT ORIFICE BYPASS	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-36	RC	LOOP A RCS S/D COMMUNICATION LINE ISOL	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-37	RC	LOOP A RCS S/D COMMUNICATION LINE VENT	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-4	RC	FR SIS TO LOOP A	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-5	RC	REACTOR VESSEL - VENT	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-6	RC	FR SIS TO REACTOR VESSEL LINE DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-7	RC	FR SIS TO LOOP B LINE - DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-8	RC	FR SIS TO LOOP B LINE - VENT	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-8-9	RC	CHARGING LINE TO LOOP B - DRAIN	HIAW 1-7	2	CLOSE	EXCLUDED					
RC-9-3	RC	45 PENETRATION LEAK TEST	HIAW 1-7	2	CLOSE	EXCLUDED					
CV31221	RC	PRT N2 SUPPLY ISOL	HIAW 1-7	2	BY SS	A	ACT-CLOSE	SP-1272	E	Q	
								SP-1072.2	LT	R	
CV31224	RC	LOOP B TO PRESSURIZER	HIAW 1-7	2	THROT	EXCLUDED					
CV31226	RC	LOOP B TO PRESSURIZER	HIAW 1-7	2	THROT	EXCLUDED					
CV31231	RC	PRESSURIZER OUTLET TO PRZR RLF TNK A	HIAW 1-7	2	CLOSE	B	ACT-BOTH	SP-1291	E	CS	
CV31232	RC	PRESSURIZER OUTLET TO PRZR RLF TNK B	HIAW 1-7	2	CLOSE	B	ACT-BOTH	SP-1291	E	CS	
CV31318	RC	PRT SAMPLE TO GA	HIAW 1-7	2	BY SS	A	ACT-CLOSE	SP-1248	E	Q	
								SP-1072.1	LT	R	
CV31319	RC	PRT SAMPLE TO GA	HIAW 1-7	2	BY SS	A	ACT-CLOSE	SP-1248	E	Q	
								SP-1072.1	LT	R	
CV31321	RC	RTR MAJ WATER TO PRT ISOL	HIAW 1-7	2	BY SS	A	ACT-CLOSE	SP-1272	E	Q	
								SP-1072.45	LT	R	
MV32195	RC	PRESSURIZER OUTLET TO PRZR RLF TNK A	HIAW 1-7	2	OPEN	B	ACT-BOTH	SP-1265	E	Q	
MV32196	RC	PRESSURIZER OUTLET TO PRZR RLF TNK B	HIAW 1-7	2	OPEN	B	ACT-BOTH	SP-1265	E	Q	
SV37035	RC	PRESSURIZER VENT VALVE A	HIAW 1-7	2	CLOSE	B	ACT-BOTH	SP-1248	E	R	
SV37036	RC	PRESSURIZER VENT VALVE B	HIAW 1-7	2	CLOSE	B	ACT-BOTH	SP-1248	E	R	
SV37037	RC	RTR HEAD VENT VALVE A	HIAW 1-7	2	CLOSE	B	ACT-BOTH	SP-1248	E	R	
SV37038	RC	RTR HEAD VENT VALVE B	HIAW 1-7	2	CLOSE	B	ACT-BOTH	SP-1248	E	R	
SV37039	RC	VENT TO PRT VALVE A	HIAW 1-7	2	CLOSE	B	ACT-BOTH	SP-1248	E	R	
SV37040	RC	VENT TO CNTMT ATMOSPHERE	HIAW 1-7	2	CLOSE	B	ACT-BOTH	SP-1248	E	R	
CV31019	RD	RAD MON 2R-11 & 2R-12 SMPL RTN	NF-39790-3	N/A	OPEN	A	ACT-CLOSE	SP-1244	E	Q	
								SP-1072.23	LT	R	
CV31022	RD	RAD MON 2R-11 & 2R-12 SMPL RTN	NF-39790-3	N/A	OPEN	A	ACT-CLOSE	SP-1244	E	Q	
								SP-1072.22	LT	R	
CV31092	RD	RAD MON 2R-11 & 2R-12 SMPL INLET	NF-39790-3	N/A	OPEN	A	ACT-CLOSE	SP-1244	E	Q	
								SP-1072.22	LT	R	
CV31750	RD	RAD MON 2R-11 & 2R-12 SMPL INLET	NF-39790-3	N/A	OPEN	A	ACT-CLOSE	SP-1244	E	Q	
								SP-1072.23	LT	R	
RH-1-1	RH	RHR PUMP #12 SUCT LINE	HIAW 1-31	3	OPEN	EXCLUDED					
RH-1-2	RH	RHR PUMP #11 SUCT LINE	HIAW 1-31	3	OPEN	EXCLUDED					
RH-1-3	RH	RH EXCH #12 TUBE INLET	HIAW 1-31	3	OPEN	EXCLUDED					

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Requirement
RH-1.4	RH	RH EXCH #11 TUBE INLET	HIAW 1-31	3	OPEN	EXCLUDED					
RH-10-1	RH	DOWNSTREAM OF RH EXCH #12	HIAW 1-31	3	OPEN	EXCLUDED					
RH-10-2	RH	DOWNSTREAM OF RH EXCH #11	HIAW 1-31	3	OPEN	EXCLUDED					
RH-2-1	RH	RHR PUMP #12 DISCH LINE	HIAW 1-31	3	OPEN	EXCLUDED					
RH-2-2	RH	RHR PUMP #11 DISCH LINE	HIAW 1-31	3	OPEN	EXCLUDED					
RH-2-3	RH	RH EXCH #11 & #12 CROSSOVER (INLET)	HIAW 1-31	3	CLOSE	EXCLUDED	NOTE 1				
RH-2-4	RH	RH EXCH #11 & #12 CROSSOVER (INLET)	HIAW 1-31	3	CLOSE	EXCLUDED	NOTE 1				
RH-2-5	RH	RH EXCH #11 & #12 CROSSOVER (OUTLET)	HIAW 1-31	3	CLOSE	EXCLUDED	NOTE 1				
RH-2-6	RH	RH EXCH #11 & #12 CROSSOVER (OUTLET)	HIAW 1-31	3	CLOSE	EXCLUDED	NOTE 1				
RH-3-1	RH	RHR PUMP #12 SUCT LINE CHECK	HIAW 1-31	3	CLOSE	C	ACT-CLOSE		E	R	
RH-3-2	RH	RHR PUMP #11 SUCT LINE CHECK	HIAW 1-31	3	CLOSE	C	ACT-CLOSE		E	R	
RH-3-3	RH	RHR PUMP #12 DISCH LINE CHECK	HIAW 1-31	3	CLOSE	C	ACT-OPEN		E	CS	
RH-3-4	RH	RHR PUMP #11 DISCH LINE CHECK	HIAW 1-31	3	CLOSE	C	ACT-OPEN		E	CS	
RH-4-1	RH	2" RHR PUMP #12 DISCH LINE - DRAIN	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-4-2	RH	2" RHR PUMP #11 DISCH LINE - DRAIN	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-5-1	RH	2" RH EXCH #11 RECIR LINE	HIAW 1-31	3	OPEN	EXCLUDED					
RH-5-2	RH	2" RH EXCH #12 RECIR LINE	HIAW 1-31	3	OPEN	EXCLUDED					
RH-6-1	RH	2 IN LETDOWN LINE BY PASS CHK	HIAW 1-31	3	OPN/CLS	C	ACT-OPEN		E	CS	
RH-7-1	RH	2 IN LETDOWN LINE MV-32234 BY PASS	HIAW 1-31	3	OPEN	EXCLUDED					
RH-7-10	RH	LOCAL SAMPLE DOWNSTREAM OF CV-31230	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-11	RH	RH EXCH #12 DRAIN - SHELL	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-12	RH	RH EXCH #11 DRAIN - SHELL	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-13	RH	RH EXCH #12 DRAIN - SHELL	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-14	RH	RH EXCH #11 DRAIN - SHELL	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-15	RH	LOOP A HOT LEG DRAIN	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-16	RH	LOOP B HOT LEG DRAIN	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-17	RH	LOOP B HOT LEG VENT	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-2	RH	FR RH EXCH TO SI PUMP #12 SUCT - VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
RH-7-20	RH	VENT FROM RESID HT EXCH #11 TO CV-31235	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-21	RH	VENT FROM RESID HT EXCH #11 TO CV-31230	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-22	RH	RHR PUMP SUCT FROM SUMP B	HIAW 1-44	B	OPEN	EXCLUDED					
RH-7-23	RH	RHR PUMP SUCT FROM SUMP B	HIAW 1-44	B	OPEN	EXCLUDED					
RH-7-3	RH	RHR PUMP #12 SUCT LINE - STRAINER DRAIN	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-4	RH	RHR PUMP #11 SUCT LINE - STRAINER DRAIN	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-5	RH	RH EXCH #11 & #12 CROSSOVER - VENT (INLET)	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-6	RH	RH EXCH #11 & #12 CROSSOVER - VENT (OUTLET)	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-7	RH	RHR PUMP #12 CASING DRAIN	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-8	RH	RHR PUMP #11 CASING DRAIN	HIAW 1-31	3	CLOSE	EXCLUDED					
RH-7-9	RH	FR RH EXCH TO SI PUMP #11 SUCT - VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
RH-8-1	RH	RHR PUMP #11 & #12 SUCTION RELIEF	HIAW 1-31	3	CLOSE	C	ACT-BOTH	P3120-59-1A	SP	10Y	
CV31235	RH	RH EXCH #11 OUTLET	HIAW 1-31	3	OPEN	B	PAS-OPEN		PV	2Y	
CV31236	RH	RH EXCH #12 OUTLET	HIAW 1-31	3	OPEN	B	PAS-OPEN		PV	2Y	
MV32060	RH	DOWNSTREAM OF CV-31230	HIAW 1-31	3	CLOSE	A	PAS-CLOSE	SP-1273	PV	2Y	
								SP-1070	LT	R	
MV32164	RH	1 REAC LOOP A RSDL HT RMVL ISOL MV A	HIAW 1-31	3	CLOSE	A	PAS-CLOSE	SP-1273	PV	2Y	
MV32165	RH	1 REAC LOOP A RSDL HT RMVL ISOL MV B	HIAW 1-31	3	CLOSE	A	PAS-CLOSE	SP-1070	LT	R	
MV32230	RH	1 REAC LOOP B RSDL HT RMVL ISOL MV A	HIAW 1-31	3	CLOSE	A	PAS-CLOSE	SP-1070	LT	R	
								SP-1273	PV	2Y	
MV32231	RH	1 REAC LOOP B RSDL HT RMVL ISOL MV B	HIAW 1-31	3	CLOSE	A	PAS-CLOSE	SP-1070	LT	R	
								SP-1273	PV	2Y	



## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31740	SA	1 CNTMT INST AIR ISOL VLV A	NF-39244	N/A	OPEN	A	ACT-CLOSE	SP-1070	LT	R	
CV31741	SA	1 CNTMT INST AIR ISOL VLV B	NF-39244	N/A	OPEN	A	ACT-CLOSE	SP-1072.20	LT	R	
BD-1-1	SB	12 STM GENERATOR INSIDE CONTAINMENT	NF-88740	24	OPEN	EXCLUDED		SP-1072.20	LT	R	
BD-1-2	SB	12 STM GENERATOR INSIDE CONTAINMENT	NF-88740	24	OPEN	EXCLUDED					
BD-1-3	SB	11 STM GENERATOR INSIDE CONTAINMENT	NF-88740	24	OPEN	EXCLUDED					
BD-1-4	SB	11 STM GENERATOR INSIDE CONTAINMENT	NF-88740	24	OPEN	EXCLUDED					
BD-2-1	SB	12 STM GENERATOR INSIDE CONTAINMENT	NF-88740	24	OPEN	EXCLUDED					
BD-2-2	SB	11 STM GENERATOR INSIDE CONTAINMENT	NF-88740	24	OPEN	EXCLUDED					
MV32040	SB	11 SGB ISOL MV	NF-88740	24	OPEN	B	ACT-CLOSE	SP-1267	E	Q	
MV32043	SB	12 SGB ISOL MV	NF-88740	24	OPEN	B	ACT-CLOSE	SP-1267	E	Q	
MV32044	SB	11 SGB ISOL MV	NF-88740	24	OPEN	B	ACT-CLOSE	SP-1267	E	Q	
MV32058	SB	12 SGB ISOL MV	NF-88740	24	OPEN	B	ACT-CLOSE	SP-1267	E	Q	
SB-3-8	SB	11 S/G TO 11 SGB FLASK TNK DRN - INSIDE CNTMT	NF-88740	24	CLOSE	EXCLUDED					
SB-3-9	SB	12 S/G TO 11 SGB FLASH TNK DRN - INSIDE CNTMT	NF-88740	24	CLOSE	EXCLUDED					
SB-34-1	SB	11 STEAM GENERATOR DRN	NF-88740	24	CLOSE	EXCLUDED					
SB-34-2	SB	12 STEAM GENERATOR DRN	NF-88740	24	CLOSE	EXCLUDED					
SB-4-1	SB	11 S/G TO 11 SGB FLASH TNK DRN - INSIDE CNTMT	NF-88740	24	CLOSE	EXCLUDED					
SI-1-1	SI	11 RFLG WTR STOR TANK OUTLET	HIAW 1-45	9	OPEN	EXCLUDED					
SI-10-1	SI	SAFETY INJECTION PUMP 11 DISCH CHK	HIAW 1-45	9	OPN/CLS	C	ACT-OPEN	SP-1092A	E	R	
						C	ACT-CLOSE	SP-1070	E	R	
SI-10-2	SI	SAFETY INJECTION PUMP 12 DISCH CHK	HIAW 1-45	9	OPN/CLS	C	ACT-OPEN	SP-1092A	E	R	
						C	ACT-CLOSE	SP-1070	E	R	
SI-13-1	SI	SAFETY INJECTION PUMP 11 DISCH	HIAW 1-45	9	OPEN	EXCLUDED					
SI-13-2	SI	SAFETY INJECTION PUMP 12 DISCH	HIAW 1-45	9	OPEN	EXCLUDED					
SI-14-1	SI	SI PUMP DISCH CROSSOVER LINE	HIAW 1-45	9	OPEN	EXCLUDED					
SI-14-2	SI	SI PUMP DISCH CROSSOVER LINE	HIAW 1-45	9	OPEN	EXCLUDED					
SI-15-1	SI	FR ACCUMULATOR 11 12 " OUTLET TO RC DRN TK	HIAW 1-44	8	OPEN	EXCLUDED					
SI-15-10	SI	11 SI RECIRC PUMP DISCH TO SI PUMP SUCT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-15-11	SI	11 SI RECIRC PUMP SUCT ISOLATION	HIAW 1-45	9	OPEN	EXCLUDED					
SI-15-12	SI	11 SI RECIRC PUMP DISCH ISOLATION	HIAW 1-45	9	OPEN	EXCLUDED					
SI-15-13	SI	SI PUMP SUCT TO 11 SI RECIRC PUMP SUCT	HIAW 1-45	9	OPEN	EXCLUDED					
SI-15-14	SI	11 SI RECIRC PUMP DISCH TO 121 BAT FILL BY/P	HIAW 1-41	9	CLOSE	EXCLUDED					
SI-15-15	SI	11 SI RECIRC PUMP DISCH TO 11 BAT FILL LINE	HIAW 1-41	9	OPEN	EXCLUDED					
SI-15-2	SI	FROM ACC 12 12 " OUTLET TO RC DRAIN TK	HIAW 1-44	8	OPEN	EXCLUDED					
SI-15-3	SI	FROM SI PUMP SUCT TO 11 SI RECIRC PUMP SUCT	HIAW 1-45	9	OPEN	EXCLUDED					
SI-15-4	SI	FROM 12 SI PUMP DISCH TO TEST LINE	HIAW 1-45	9	OPEN	EXCLUDED					
SI-15-5	SI	FR RWST OUTLET LINE TO SI PMP SUCT	HIAW 1-45	9	OPEN	EXCLUDED					
SI-15-6	SI	COLD LEG INJ LINE TO LOOP A COLD LEG	HIAW 1-44	8	THROT	EXCLUDED					
SI-15-7	SI	COLD LEG INJ LINE TO LOOP B COLD LEG	HIAW 1-44	8	THROT	EXCLUDED					
SI-15-8	SI	SI TO REACTOR VESSEL THROTTLE VALVE	HIAW 1-44	8	THROT	EXCLUDED					
SI-15-9	SI	SI TO REACTOR VESSEL THROTTLE VALVE	HIAW 1-44	8	THROT	EXCLUDED					
SI-16-1	SI	FROM SI PUMP 11 DISCH TO TEST LINE	HIAW 1-45	9	CLOSE	C	ACT-OPEN	SP-1088	E	Q	
SI-16-2	SI	FROM SI PUMP 12 DISCH TO TEST LINE	HIAW 1-45	9	CLOSE	C	ACT-OPEN	SP-1088	E	Q	
SI-16-3	SI	FR RWST OUTLET LINE TO SI PUMP SUCT	HIAW 1-45	9	CLOSE	C	ACT-OPEN	SP-1088	E	Q	
SI-16-4	SI	COLD LEG INJECTION LINE TO LOOP B COLD LEG	HIAW 1-44	8	CLOSE	C	ACT-OPEN	SP-1092A	E	R	
							ACT-CLOSE	SP-1070	E	R	
SI-16-5	SI	COLD LEG INJECTION LINE TO LOOP A COLD LEG	HIAW 1-44	8	CLOSE	C	ACT-OPEN	SP-1092A	E	R	
							ACT-CLOSE	SP-1070	E	R	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
SI-16-6	SI	REACTOR VESSEL INJ LINE TO REACTOR VESSEL	HIAW 1-44	8	CLOSE	C	ACT-OPEN	SP-1092A	E	R	
SI-16-7	SI	REACTOR VESSEL INJ LINE TO REACTOR VESSEL	HIAW 1-44	8	CLOSE	C	ACT-CLOSE	SP-1070	E	R	
							ACT-OPEN	SP-1092A	E	R	
							ACT-CLOSE	SP-1070	E	R	
SI-18-1	SI	VLV HOUSING DRAIN @ MV 32075	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-18-2	SI	VLV HOUSING DRAIN @ MV 32076	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-19-1	SI	ACCUMULATOR 11 VENT	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-19-2	SI	ACCUMULATOR 12 VENT	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-19-4	SI	SI PUMP SUCT LINE VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-1	SI	ACCUMULATOR 11 LOCAL SAMPLE	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-10	SI	SAFETY INJECTION PUMP 12 DISCH LINE DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-11	SI	SI PUMP 11 RECIR LINE VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-12	SI	SI PUMP 12 RECIR LINE VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-13	SI	TEST LINE SHUT-OFF DOWNSTREAM OF 1-FI-929	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-17	SI	COLD LEG INJ LINE LOOP A COLD LEG DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-18	SI	ACCUMULATOR 11 OUTLET LINE DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-19	SI	ACCUMULATOR 11 OUTLET LINE DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-2	SI	ACCUMULATOR 12 LOCAL SAMPLE	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-20	SI	COLD LEG - ACCUMULATOR #11 INLET - DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-21	SI	ACCUMULATOR 11 OUTLET LINE DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-22	SI	COLD LEG INJECTION LINE LOOP A COLD LEG DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-23	SI	REACTOR VESSEL INJ TO REACTOR VESSEL	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-24	SI	NITROGEN SPLY LINE DRAIN @ ACCUMULATOR 12	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-25	SI	TEST LINE VENT	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-26	SI	ACCUMULATOR 11 OUTLET LINE-TEST LINE DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-27	SI	COLD LEG-ACCUMULATOR 12 INLET-DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-28	SI	12 ACCUM OUTLET LINE DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-29	SI	COLD LEG INJ LINE LOOP B COLD LEG DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-3	SI	COLD LEG INJECTION LINE-VENT	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-30	SI	REACT VESSEL INJ TO REACT VESSEL LINE DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-31	SI	NITROGEN SUPPLY LINE DRAIN @ ACC 11	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-33	SI	RHR PUMP 11 SUCTION-VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-34	SI	RHR PUMP 12 SUCTION-VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-35	SI	REACT VESSEL INJ LINE REACT VESSEL DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-36	SI	COLD LEG INJ LINE TO LOOP B COLD LEG DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-37	SI	REACT VESSEL INJ TO REACT VESSEL LINE DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-38	SI	COLD LEG-ACCUMULATOR 11 INLET-VENT	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-4	SI	REAC VESSEL INJ LINE VENT	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-41	SI	UPSTREAM OF CHECK VALVE NO SI-9-5 (LINE VENT)	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-42	SI	UPSTREAM OF VALVE NO MV-32085 (LINE VENT)	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-43	SI	DOWNSTREAM OF VALVE NO MV-32084 (LINE VENT)	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-44	SI	UPSTRM OF CHECK VALVE NO SI-21-2 (LINE VENT)	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-5	SI	TEST LINE VENT	HIAW 1-44	8	CLOSE	EXCLUDED					
SI-20-59	SI	11 SAFETY INJECTION PUMP - DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-6	SI	REF WTR STR TANK LOCAL SAMPLE	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-60	SI	12 SAFETY INJECTION PUMP - DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-61	SI	11 SAFETY INJECTION PUMP - VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-62	SI	12 SAFETY INJECTION PUMP - VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-63	SI	11 SAFETY INJECTION PUMP - DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-64	SI	12 SAFETY INJECTION PUMP - DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-65	SI	12 ACCUMULATOR OUTLET - LINE DRAIN	HIAW 1-44	8	CLOSE	EXCLUDED					

## ASME SECTION XI VALVES UNIT 1

Valve Number	System	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
SI-20-66	SI	11 SI RECIRC PUMP SUCT DRAIN & LOCAL SAMPLE	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-67	SI	SI PUMPS SUCT LINE DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-68	SI	11 SI PUMP RECIRC LINE ORIFICE INLET VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-69	SI	12 SI PUMP RECIRC LINE ORIFICE INLET VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-7	SI	SAFETY INJECTION PUMP 11 CASING DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-72	SI	11 SI RECIRC PUMP DISCH LINE VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-73	SI	11 SI RECIRC PUMP DISCH LINE DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-74	SI	11 SI RECIRC PUMP SUCT LINE VENT	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-75	SI	11 SI RECIRC PMP DISCH TO 121 BAT FILL BY-PASS	HIAW 1-41	9	CLOSE	EXCLUDED					
SI-20-8	SI	SAFETY INJECTION PUMP 12 CASING DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-20-9	SI	SAFETY INJECTION PUMP 11 DISCH LINE-DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-21-1	SI	3/4" FR COLD LEG INJECTION LINE TO TEST LINE	HIAW 1-44	8	OPN/CLS	EXCLUDED					
SI-21-2	SI	3/4" FR REAC VESSEL INJECT LINE TO TEST LINE	HIAW 1-44	8	OPN/CLS	EXCLUDED					
SI-25-1	SI	ACCUMULATOR 11 RELIEF	HIAW 1-44	8	CLOSE	C	ACT-BOTH	P3120-69-11B	SP	10Y	
SI-25-2	SI	ACCUMULATOR 12 RELIEF	HIAW 1-44	8	CLOSE	C	ACT-BOTH	P3120-69-12B	SP	10Y	
SI-26-1	SI	LO HEAD TO REAC VSL RELIEF	HIAW 1-44	8	CLOSE	C	ACT-BOTH	P3120-69-1A	SP	10Y	
SI-27-1	SI	MV32206 LEAK OFF	HIAW 1-44	8	OPEN	EXCLUDED					
SI-27-2	SI	MV32207 LEAK OFF	HIAW 1-44	8	OPEN	EXCLUDED					
SI-28-1	SI	11 SI RECIRC PUMP CASING DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-30-1	SI	11 SAFETY INJECTION PMP BRG HSG-DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-30-2	SI	12 SAFETY INJECTION PMP BRG HSG-DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-30-3	SI	11 SAFETY INJECTION PMP OIL RESERVE DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-30-4	SI	12 SAFETY INJECTION PMP OIL RESERVE DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-30-5	SI	11 SAFETY INJECTION PMP BRG HSG-DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-30-6	SI	12 SAFETY INJECTION PMP BRG HSG-DRAIN	HIAW 1-45	9	CLOSE	EXCLUDED					
SI-4-1	SI	11 SI PUMP SUCT LINE RELIEF	HIAW 1-45	9	CLOSE	C	ACT-BOTH	P3120-69-11A	SP	10Y	
SI-4-2	SI	12 SI PUMP SUCT LINE RELIEF	HIAW 1-45	9	CLOSE	C	ACT-BOTH	P3120-69-12A	SP	10Y	
SI-6-1	SI	ACC #12 OUTLET TO LOOP B COLD LEG CHECK	HIAW 1-44	8	CLOSE	A, C	ACT-OPEN	SP-1092C	E	R	
							ACT-CLOSE	SP-1070	LT	R	
SI-6-2	SI	DOWNSTREAM OF CHECK SI-6-1	HIAW 1-44	8	CLOSE	A, C	ACT-OPEN	SP-1092C	E	R	
							ACT-CLOSE	SP-1269	LT	R	
SI-6-3	SI	ACC #11 12 OUTLET TO LOOP A COLD LEG CHK	HIAW 1-44	8	CLOSE	A, C	ACT-OPEN	SP-1092C	E	R	
							ACT-CLOSE	SP-1070	LT	R	
SI-6-4	SI	DOWNSTREAM OF CHECK SI-6-3	HIAW 1-44	8	CLOSE	A, C	ACT-OPEN	SP-1092C	E	R	
							ACT-CLOSE	SP-1269	LT	R	
SI-7-1	SI	FR REFUELING WTR STR TK TO RHR PUMP SUCT	HIAW 1-45	9	CLOSE	C	ACT-OPEN	SP-1092B	E	R	
							ACT-CLOSE		E	R	
SI-7-2	SI	FR REFUELING WTR STR TK TO RHR PUMP SUCT	HIAW 1-45	9	CLOSE	C	ACT-OPEN	SP-1092B	E	R	
							ACT-CLOSE		E	R	
SI-8-1	SI	FROM BORIC ACID TNKS TO SI PUMPS	HIAW 1-45	9	OPEN	B	PAS-OPEN		PV	2Y	
SI-8-2	SI	FROM BORIC ACID TNKS TO SI PUMPS	HIAW 1-45	9	CLOSE	B	PAS-CLOSE		PV	2Y	
SI-9-1	SI	COLD LEG INJ LINE TO LOOP B COLD LEG CHK	HIAW 1-44	8	CLOSE	C	ACT-OPEN	SP-1092A	E	R	
							ACT-CLOSE	SP-1070	E	R	
SI-9-2	SI	COLD LEG INJ LINE TO LOOP A COLD LEG CHK	HIAW 1-44	8	CLOSE	C	ACT-OPEN	SP-1092A	E	R	
							ACT-CLOSE	SP-1070	E	R	
SI-9-3	SI	FROM RESIDUAL HT EXCH TO Rx VESSEL CHK	HIAW 1-44	8	CLOSE	A, C	ACT-OPEN	SP-1092A	E	R	
							ACT-CLOSE	SP-1070	LT	R	
SI-9-4	SI	FROM RESIDUAL HT EXCH TO Rx VESSEL CHK	HIAW 1-44	8	CLOSE	A, C	ACT-OPEN	SP-1092A	E	R	
							ACT-CLOSE	SP-1070	LT	R	
SI-9-5	SI	FROM RH EXCH TO REACTOR VESSEL CHK	HIAW 1-44	8	CLOSE	A, C	ACT-OPEN	SP-1092A	E	R	
							ACT-CLOSE	SP-1070	LT	R	

Valve Number	Sys	Description	P&ID	Code	Normal	Posn	Category	V/V	Function	Test Proc	Test Type	Test Freq	Relief Request
SV-9-6	SI	FROM RH EXCH TO REACTOR VESSEL CHK	HIAW 1-44	B	CLOSE		A, C		ACT-OPEN	SP-1092A	E	R	
CV31242	SI	N2 SUPPLY TO ACC HCV	HIAW 1-44	B	CLOSE		A		ACT-CLOSE	SP-1070	LT	R	
CV31440	SI	N2 SUPPLY TO ACC CONTNMT ISOL	HIAW 1-44	B	OPN/CLS		A		PAS-CLOSE	SP-1072.31	PV	2Y	
CV31441	SI	N2 SUPPLY TO 11 ACC ISOL	HIAW 1-44	B	OPN/CLS		A		ACT-CLOSE	SP-1072.31	LT	R	
CV31443	SI	ACC TO RCDT	HIAW 1-44	B	OPN/CLS		B		ACT-CLOSE	SP-1072.31	E	CS	
CV31444	SI	N2 SUPPLY TO 12 ACC ISOL	HIAW 1-44	B	OPN/CLS		A		ACT-CLOSE	SP-1072.31	LT	R	
CV31446	SI	ACC TO RCDT	HIAW 1-44	B	OPN/CLS		B		ACT-CLOSE	SP-1072.31	LT	R	
CV31447	SI	ACC AFTER CK TEST VLV	HIAW 1-44	B	CLOSE		B		PAS-CLOSE	SP-1070	PV	2Y	
CV31448	SI	TEST LINE - FROM 12 IN ACCUMULATOR 11 OUTLET	HIAW 1-44	B	CLOSE		EXCLUDED						
CV31449	SI	ACC AFTER CK TEST VLV	HIAW 1-44	B	CLOSE		B		PAS-CLOSE	SP-1070	PV	2Y	
CV31450	SI	TEST LINE - FROM 12" ACCUMULATOR 12 OUTLET	HIAW 1-44	B	CLOSE		EXCLUDED						
CV32084	SI	FR RH EXCH TO REACTOR VESSEL	HIAW 1-44	B	OPN		B		PAS-OPEN		PV	2Y	
SV32085	SI	FR RH EXCH TO REACTOR VESSEL	HIAW 1-44	B	OPN		B		PAS-OPEN		PV	2Y	
SV32067	SI	1 SAF INJ REAC VSL INJ ISOL MV B	HIAW 1-44	B	CLOSE		B		ACT-OPEN	SP-1236	E	CS	
SV32088	SI	1 SAF INJ LOOP B COLD LEG ISOL MV	HIAW 1-44	B	OPN		B		PAS-OPEN	SP-1236	PV	2Y	
SV32069	SI	1 SAF INJ REAC VSL INJ ISOL MV A	HIAW 1-44	B	CLOSE		B		ACT-OPEN	SP-1236	E	CS	
SV32070	SI	1 SAF INJ LOOP A COLD LEG ISOL MV	HIAW 1-44	B	OPN		B		PAS-OPEN		PV	2Y	
SV32071	SI	ACCUMULATOR 11 12 IN OUTLET	HIAW 1-44	B	OPN		B		PAS-OPEN		PV	2Y	
SV32072	SI	ACCUMULATOR 12 12 IN OUTLET	HIAW 1-44	B	OPN		B		PAS-OPEN		PV	2Y	
SV32073	SI	1 SAF INJ COLD LEG INJ ISOL MV	HIAW 1-44	B	OPN		B		PAS-OPEN		PV	2Y	
SV32074	SI	1 SAF INJ REAC VSL INJ ISOL MV	HIAW 1-44	B	OPN		B		PAS-OPEN		PV	2Y	
SV32075	SI	11 CONTM SMP B ISOL MV A1	HIAW 1-44	B	CLOSE		A		ACT-BOTH	SP-1137	E	R	#3
SV32076	SI	11 CONTM SMP B ISOL MV A2	HIAW 1-44	B	CLOSE		A		ACT-BOTH	SP-1072.30A	LT	R	#3
SV32077	SI	11 CONTM SMP B ISOL MV B1	HIAW 1-44	B	CLOSE		B		ACT-BOTH	SP-1137	E	R	
SV32078	SI	11 CONTM SMP B ISOL MV B2	HIAW 1-44	B	CLOSE		B		ACT-BOTH	SP-1137	E	R	
SV32079	SI	REF WTR STR TK OUTLET	HIAW 1-45	B	CLOSE		B		ACT-OPEN	SP-1088	E	Q	
SV32080	SI	REF WTR STR TK OUTLET	HIAW 1-45	B	CLOSE		B		ACT-OPEN	SP-1088	E	Q	
SV32081	SI	BAST TO 11 & 12 SI PUMP SUCTION MV A	HIAW 1-45	B	CLOSE		B		ACT-BOTH	SP-1088	E	Q	
SV32082	SI	BAST TO 11 & 12 SI PUMP SUCTION MV B	HIAW 1-45	B	CLOSE		B		ACT-BOTH	SP-1088	E	Q	
SV32083	SI	BAST TO 11 & 12 SI PUMP SUCTION MV C	HIAW 1-45	B	OPN		B		PAS-OPEN		PV	2Y	
SV32084	SI	RFLG WTR TO 11 RSOL HT RMVL PMP ISOL MV	HIAW 1-45	B	OPN		B		PAS-OPEN		PV	2Y	
SV32085	SI	RFLG WTR TO 12 RSOL HT RMVL PMP ISOL MV	HIAW 1-45	B	OPN		B		PAS-OPEN		PV	2Y	
SV32162	SI	SI PUMP 11 SUCTION LINE	HIAW 1-45	B	OPN		B		PAS-OPEN		PV	2Y	
SV32163	SI	SI PUMP 12 SUCTION LINE	HIAW 1-45	B	OPN		B		PAS-OPEN	SP-1236	E	CS	
SV32202	SI	SAF INJ TEST TO 11 RFLG WTR STOR TANK MV A	HIAW 1-45	B	OPN		B		ACT-BOTH	SP-1236	E	CS	
SV32203	SI	SAF INJ TEST TO 11 RFLG WTR STOR TANK MV B	HIAW 1-45	B	OPN		B		ACT-BOTH	SP-1236	E	CS	
SV32206	SI	FR RH EXCH TO SI PUMP 11 SUCT	HIAW 1-45	B	CLOSE		B		ACT-OPEN	SP-1137	E	R	
SV32207	SI	FR RH EXCH TO SI PUMP 12 SUCT	HIAW 1-45	B	CLOSE		B		ACT-OPEN	SP-1137	E	R	
SV31402	SS	1A SGB SAMPLE # SM-35 (OUTSIDE CNTMT)	NF-3923B	20	OPN		B		ACT-CLOSE		E	Q	
SV31403	SS	1B SGB SAMPLE # SM-36 (OUTSIDE CNTMT)	NF-3923B	20	OPN		B		ACT-CLOSE		E	Q	
SV31637	SS	1A SGB SAMPLE # SM-35 (INSIDE CNTMT)	NF-3923B	20	OPN		B		ACT-CLOSE		E	Q	
SV31638	SS	1B SGB SAMPLE # SM-36 (INSIDE CNTMT)	NF-3923B	20	OPN		B		ACT-CLOSE		E	Q	
SV32400	SS	PRZR STEAM SPACE SAMPLE VLV A	NF-3923B	20	OPN/CLS		A		ACT-CLOSE	SP-1242	E	Q	
										SP-1072.15	LT	R	



Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	V/V Category	V/V Function	Test Proc	Test Type	Test Freq	Relief Request
SV32401	SS	PHZR STEAM SPACE SAMPLE VLV B	NF-39238	20	OPN/CLS	A	ACT-CLOSE	SP-1072.15	E	Q	
SV32402	SS	PHZR LIQ SAMPLE VLV A	NF-39238	20	OPN/CLS	A	ACT-CLOSE	SP-1072.16	LT	R	
SV32403	SS	PHZR LIQ SAMPLE VLV B	NF-39238	20	OPN/CLS	A	ACT-CLOSE	SP-1072.16	LT	R	
SV32404	SS	LOOP B HOT LEG SMPL	NF-39238	20	OPN/CLS	A	ACT-CLOSE	SP-1072.16	LT	R	
SV32405	SS	LOOP B HOT LEG SMPL	NF-39238	20	OPN/CLS	A	ACT-CLOSE	SP-1072.17	LT	R	
SV33167	SS	VCT TO GAS ANALYZER	HIAW 1-125	20	CLOSE	EXCLUDED					
SM-10-1	VC	SAMPLE RET LINE TO VOL CONTR TANK	NF-39238	5	OPN/CLS	C	ACT-CLOSE		E	R	
SM-7-4	VC	11 RHR LOOP SMPL NO SM-4	HIAW 1-31	3	OPEN	EXCLUDED					
SM-7-7	VC	VOL CONT TANK GAS SPACE - SAMPLE NO SM-7	HIAW 1-39	5	OPEN	EXCLUDED					
VC-1-1	VC	MV-32080 BY-PASS CHARGING PUMP SUCT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-10-1	VC	DOWNSTREAM OF CHARGING PUMP 11	HIAW 1-39	5	OPEN	EXCLUDED	NOTE 11				
VC-10-2	VC	DOWNSTREAM OF CHARGING PUMP 12	HIAW 1-39	5	OPEN	EXCLUDED	NOTE 11				
VC-10-3	VC	DOWNSTREAM OF CHARGING PUMP 13	HIAW 1-39	5	OPEN	EXCLUDED	NOTE 11				
VC-11-107	VC	ION EXCH FLTR TO HOLD UP TNL 121	HIAW 1-40	6	OPEN	EXCLUDED					
VC-11-108	VC	HOLD UP TNL 121 TO VENT HDR	HIAW 1-40	6	OPEN	EXCLUDED					
VC-11-109	VC	HOLD UP TNL 121 TO BLDG EXH	HIAW 1-40	6	CLOSE	EXCLUDED					
VC-11-110	VC	HOLD UP TNL 121 OUTLT	HIAW 1-40	6	CLOSE	EXCLUDED					
VC-11-111	VC	HOLD UP TNL 121 OUTLT TO DRAIN	HIAW 1-40	6	CLOSE	EXCLUDED					
VC-11-119	VC	11 BORIC ACID TANK INLET	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-11-120	VC	121 BA TNL OUTLT TO 11 & 12 BA XFER PMP SUCT	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-11-121	VC	121 BA TNL OUTLT TO 11 & 12 BA XFER PMP SUCT	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-11-122	VC	BORIC ACID TRANSFER PUMP #11 SUCT	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-123	VC	BORIC ACID TRANSFER PUMP #12 SUCT	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-124	VC	RMW TO BORIC ACID TRANSFER PUMP #11 SUCT	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-11-125	VC	RMW TO BORIC ACID TRANSFER PUMP #12 SUCT	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-11-126	VC	BATP #11 DISCH TO FILTER	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-127	VC	BORIC ACID FILTER #11 INLET	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-128	VC	BORIC ACID FILTER #11 OUTLET	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-129	VC	BORIC ACID TRANSFER PUMP #11 DISCH	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-11-130	VC	BORIC ACID FILTER TO BORIC ACID TANK #11	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-131	VC	BORIC ACID FILTER TO BORIC ACID TANK #121	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-11-132	VC	BATP #12 DISCH TO FILTER	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-133	VC	BORIC ACID TANK #121 INLET	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-11-134	VC	BORIC ACID TANK #121 OUTLET	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-139	VC	BATP #11 & #12 SUCT COVER	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-140	VC	12 BATP DISCH TO 121 RAST	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-11-141	VC	BORIC ACID TANK #11 OUTLET	HIAW 1-41	7	OPEN	EXCLUDED					
VC-11-52	VC	VCT INLET	HIAW 1-39	5	OPEN	EXCLUDED					
VC-11-57	VC	BA BLENDER DISCH DWN STRM OF GV31200	HIAW 1-39	5	OPEN	EXCLUDED					
VC-11-58	VC	DOWNSTREAM OF 1-F7-113	HIAW 1-39	5	OPEN	EXCLUDED					
VC-11-59	VC	BORIC ACID BLENDER TO SIS, SF PIT & HOLD-UP TK	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-11-60	VC	VOL CONT TK DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-11-64	VC	ION EXCH FILTERS TO HOLD-UP TK #11 INLET	HIAW 1-40	6	CLOSE	EXCLUDED					
VC-11-65	VC	HOLD-UP TANK #11 TO VENT HDR	HIAW 1-40	6	OPEN	EXCLUDED					
VC-11-66	VC	HOLD-UP TANK #11 TO BLDG EXHAUST	HIAW 1-40	6	CLOSE	EXCLUDED					
VC-11-67	VC	HOLD-UP TANK #11 OUTLET	HIAW 1-40	6	CLOSE	EXCLUDED					

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
VC-11-68	VC	HOLD-UP TANK #11 OUTLET TO DRAIN HDR	HIAW 1-40	8	CLOSE	EXCLUDED					
VC-13-1	VC	VOLUME CONTROL TANK INLET CHK	HIAW 1-39	5	OPN/CLS	C	ACT-CLOSE		E	R	
VC-13-2	VC	CHEM MIX TK #11 OUTLET TO VCT OUTLET CHK	HIAW 1-39	5	OPN/CLS	C	ACT-CLOSE		E	CS	
VC-13-3	VC	FR BORIC ACID FILTER TO BORIC ACID BLENDER	HIAW 1-39	5	OPN/CLS	EXCLUDED	NOTE 11				
VC-14-1	VC	SEAL WTR INJECT FILTERS TO RC PUMP #11 CHK	HIAW 1-38	4	THROT	A	ACT-CLOSE	SP-1279	E	CS	
								SP-1072.13A	LT	R	
VC-14-2	VC	SEAL WTR INJECT FILTERS TO RC PUMP #12 CHK	HIAW 1-38	4	THROT	A	ACT-CLOSE	SP-1279	E	CS	
								SP-1072.13B	LT	R	
VC-15-10	VC	RC PUMPS TO SW FILTER DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-15-11	VC	RC PUMPS TO SW FILTER VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-15-114	VC	CHARGING PUMP #12 SUCT TO VC TANK - DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-115	VC	CHEM MIXING TK #11 OUTLET TO VCT OLET - VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-12	VC	RC PUMPS TO SW FILTER DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-15-127	VC	HOLD-UP TK #121 TO GAS ANALYZER - DRAIN	HIAW 1-40	8	CLOSE	EXCLUDED					
VC-15-13	VC	EXCESS LETDOWN HT EXCH #11 OUTLET - DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-15-130	VC	HOLD-UP TK #121 OUTLET DRAIN	HIAW 1-40	8	CLOSE	EXCLUDED					
VC-15-14	VC	UPSTREAM OF CV-31333 VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-15-140	VC	LINE DRAIN - DOWNSTREAM OF RELIEF VA VC-25-2	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-154	VC	BORIC ACID TRANSFER PUMP #12 SUCT - DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-15-155	VC	BORIC ACID TRANSFER PUMP #11 SUCT - DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-15-156	VC	BORIC ACID TRANSFER PUMP #12 DISCH - DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-15-157	VC	BORIC ACID TRANSFER PUMP #11 DISCH - DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-15-160	VC	BORIC ACID BLENDER - SUCTION - LINE VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-161	VC	12 SEAL WTR FILTER - INLET DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-167	VC	INLET TO #12 SEAL WTR FILTER - LINE VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-168	VC	OUTLET FROM #12 SEAL WTR FILT - LINE VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-169	VC	VCT PURGE TO HI LEVEL LOOP	HIAW 1-39	5	OPEN	EXCLUDED					
VC-15-182	VC	A SUPPLY TO BA BLENDER DRAIN VALVE	HIAW 1-41	7	OPEN	EXCLUDED					
VC-15-27	VC	VC TANK INLET - VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-31	VC	BORIC ACID BLENDER INLET - VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-35	VC	BORIC ACID FILTER TO RMW LINE - VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-36	VC	BORIC ACID FILTER TO RMW LINE - VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-37	VC	UPSTREAM OF 1-FT-110	HIAW 1-39	5	OPEN	EXCLUDED					
VC-15-38	VC	DOWNSTREAM OF 1-FT-110	HIAW 1-39	5	OPEN	EXCLUDED					
VC-15-39	VC	UPSTREAM OF 1-FCV-110A DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-40	VC	DOWNSTREAM OF 1-FCV-110A	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-41	VC	BORIC ACID BLENDER TO VC TK LINE DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-47	VC	DOWNSTREAM OF SW FILTER - VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-48	VC	DOWNSTREAM OF SW FILTER - DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-49	VC	VC TANK INLET VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-5	VC	1-FT-175 & 177 BY-PASS VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-15-50	VC	CHARGING PUMP #11 VENT	HIAW 1-39	5	OPEN	EXCLUDED					
VC-15-52	VC	CHARGING PUMP #12 VENT	HIAW 1-39	5	OPEN	EXCLUDED					
VC-15-54	VC	CHARGING PUMP #13 VENT	HIAW 1-39	5	OPEN	EXCLUDED					
VC-15-56	VC	RW TO CHARGING PUMPS SUCT - DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-15-58	VC	VC TK RELIEF TO HOLD-UP TK #11 - VENT	HIAW 1-40	8	CLOSE	EXCLUDED					
VC-15-6	VC	1-FT-176 & 178 BY-PASS VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-15-61	VC	HOLD-UP TK #11 OUTLET DRAIN	HIAW 1-40	8	CLOSE	EXCLUDED					
VC-15-62	VC	HOLD-UP TK #11 TO GAS ANALYZER - DRAIN	HIAW 1-40	8	CLOSE	EXCLUDED					
VC-15-7	VC	DOWNSTREAM 1-FT-177 DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-15-8	VC	RC PUMP #12 TO SW FILTER DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
VC-15-9	VC	RC PUMPS TO SW FILTER VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-1	VC	REGENERATIVE HEAT EXCH #11 INLET - VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-10	VC	UPSTREAM OF CV-31327 DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-12	VC	UPSTRM EXCESS LETDOWN HEAT EXCH #11 - VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-13	VC	RC PUMP #11 SUCT VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-14	VC	RC PUMP #12 SUCT DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-15	VC	RC PUMP #12 SUCT VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-17	VC	RC PUMP #11 SUCT DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-18	VC	RC PUMP #12 SUCT DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-19	VC	RC PUMP #12 SUCT VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-2	VC	REGENERATIVE HEAT EXCH #11 OUTLET - DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-20	VC	RC PUMP #12 SUCT DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-21	VC	RC PUMP #11 SUCT DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-22	VC	RC PUMP #12 SUCT DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-23	VC	RC PUMP #11 SUCT VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-24	VC	RC PUMP #12 SUCT VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-25	VC	RC PUMP #11 DISCH VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-26	VC	RC PUMP #12 DISCH VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-3	VC	CV-31328 BY-PASS	HIAW 1-38	4	OPEN	EXCLUDED					
VC-16-32	VC	RC PUMP #12 BY-PASS VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-33	VC	RC PUMP #11 BY-PASS VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-34	VC	RC PUMP #12 BY-PASS	HIAW 1-38	4	OPEN	EXCLUDED					
VC-16-35	VC	RC PUMP #11 BY-PASS	HIAW 1-38	4	OPEN	EXCLUDED					
VC-16-36	VC	RC PUMP #12 BY-PASS DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-37	VC	RC PUMP #11 BY-PASS DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-38	VC	DOWNSTREAM OF 1-F1A-180	HIAW 1-38	4	OPEN	EXCLUDED					
VC-16-39	VC	DOWNSTREAM OF 1-F1A-179	HIAW 1-38	4	OPEN	EXCLUDED					
VC-16-40	VC	DOWNSTREAM OF 1-F1A-180 VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-41	VC	DOWNSTREAM OF 1-F1A-179 VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-42	VC	UPSTREAM OF CV-31334 - DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-43	VC	DOWNSTREAM OF 1-F1A-179 - DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-44	VC	DOWNSTREAM OF 1-F1A-179 - VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-45	VC	RC PUMP #12 BY-PASS DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-46	VC	RC PUMP #11 BY-PASS DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-52	VC	CHARGING PUMP #11 DISCH - VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-53	VC	UPSTREAM OF 1-HCV-142 DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-54	VC	DOWNSTREAM OF 1-HCV-142 DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-55	VC	CHARGING PUMP #13 DISCH - DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-56	VC	CHARGING PUMP #13 DISCH - VENT	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-57	VC	SEAL WTR INJECTION FILTER #12 PURGE	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-58	VC	SEAL WTR INJECTION FILTER #12 DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-6	VC	REGENERATIVE HEAT EXCH #11 INLET - DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-60	VC	SEAL WTR INJECTION FILTER #11 PURGE	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-61	VC	SEAL WTR INJECTION FILTER #11 DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-63	VC	FR RH EXCH TO LETDOWN HT EXCH - VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-64	VC	FR RH EXCH TO LETDOWN HT EXCH - VENT	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-65	VC	FR RH EXCH TO LETDOWN HT EXCH - DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-67	VC	DOWNSTREAM OF CV-31325 - LINE DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-68	VC	11 SEAL INJECTION FILTER FLUSHING DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-69	VC	12 SEAL INJECTION FILTER FLUSHING DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-16-7	VC	LTDN ORIF ISOL VLVS INLET VENT	HIAW 1-38	4	CLOSE	EXCLUDED					

Valve Number	Sys	Description	P&ID	Code	Normal	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
VC-16-73	VC	RC PUMP #12 SUCTION DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-74	VC	RC PUMP #11 SUCTION DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-78	VC	SAMPLE LINE FROM BORON MEASURING TANKS	HIAW 1-39	5	OPEN	EXCLUDED					
VC-16-8	VC	UPSTREAM OF CV-31325 DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-88	VC	SEAL WATER INJECTION TO 11 RCP NOZZLE DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-89	VC	SEAL WATER INJECTION TO 12 RCP NOZZLE DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-16-9	VC	UPSTREAM OF CV-31326 DRAIN	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-17-1	VC	CHARGING LINE CV-31328 BY-PASS CHK	HIAW 1-38	4	OPN/CLS	C	ACT-CLOSE		E	C/S	
VC-17-4	VC	RC PUMP #12 BY-PASS	HIAW 1-38	4	OPN/CLS	EXCLUDED					
VC-17-5	VC	RC PUMP #11 BY-PASS	HIAW 1-38	4	OPN/CLS	EXCLUDED					
VC-18-1	VC	CHARGING PUMP #11 SUCTION TO VC TANK INLET	HIAW 1-39	5	OPN/CLS	EXCLUDED	NOTE 11				
VC-18-2	VC	CHARGING PUMP #12 SUCTION TO VC TANK INLET	HIAW 1-39	5	OPN/CLS	EXCLUDED	NOTE 11				
VC-18-3	VC	CHARGING PUMP #13 SUCTION TO VC TANK INLET	HIAW 1-39	5	OPN/CLS	EXCLUDED	NOTE 11				
VC-21	VC	VOL CONT TANK OUTLET	HIAW 1-39	5	OPN/CLS	EXCLUDED	NOTE 11				
VC-2-2	VC	RW STOR TK TO CHARGING PUMP SUCTION	HIAW 1-39	5	OPN/CLS	EXCLUDED	NOTE 11				
VC-21-10	VC	VC TANK TO VENT HDR	HIAW 1-39	5	OPEN	EXCLUDED					
VC-21-16	VC	BORIC ACID BLENDER DISCH LOCAL SAMPLE	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-21-17	VC	CHARGING PUMP #11 SUCTION TO VC TANK	HIAW 1-39	5	OPEN	EXCLUDED					
VC-21-18	VC	CHARGING PUMP #12 SUCTION TO VC TANK	HIAW 1-39	5	OPEN	EXCLUDED					
VC-21-19	VC	CHARGING PUMP #13 SUCTION TO VC TANK	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-21-20	VC	SEAL WTR FILTER #11 PURGE	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-21-21	VC	SEAL WTR FILTER #11 DRAIN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-21-22	VC	12 SEAL WTR FILTER - PURGE CONN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-21-23	VC	12 SEAL WTR FILTER - DRAIN	HIAW 1-40	6	CLOSE	EXCLUDED					
VC-21-31	VC	HOLD-UP TANK #121 TO GAS ANALYZER	HIAW 1-41	7	OPEN	EXCLUDED					
VC-21-39	VC	BORIC ACID TANK #121 DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-21-40	VC	BATP MINIFLOW TO 121 BAST	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-21-41	VC	121 BAST RECIRC INLET SAMPLE	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-21-43	VC	HOLD-UP TANK #11 TO GAS ANALYZER	HIAW 1-40	6	OPEN	EXCLUDED					
VC-21-54	VC	BORIC ACID TANK #11 DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-21-55	VC	BATP MINIFLOW TO 11 BAST	HIAW 1-41	7	OPEN	EXCLUDED					
VC-21-56	VC	11 BAST RECIRC INLET SAMPLE	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-21-57	VC	BORIC ACID FILTER #11 VENT	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-21-58	VC	BORIC ACID FILTER #11 DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-21-84	VC	BORIC ACID TANK TO SIS - VENT	HIAW 1-41	7	CLOSE	EXCLUDED					
VC-21-9	VC	VC TANK TO GAS ANALYZER	HIAW 1-39	5	OPEN	EXCLUDED					
VC-24-1	VC	VOLUME CONTROL TANK #11 RELIEF	HIAW 1-39	5	CLOSE	C	ACT-BOTH	P3120-75-1A	SP	10Y	
VC-25-1	VC	RCP DISCH LINE TO SEAL WTR FILTER RELIEF	HIAW 1-38	4	CLOSE	C	ACT-BOTH	P3120-75-1B	SP	10Y	
VC-25-2	VC	LETDOWN LINE TO VOL CONT TK INLET	HIAW 1-38	4	OPN/CLS	EXCLUDED	NOTE 4				
VC-26-1	VC	REGN HEAT EXCH #11 LETDOWN LINE OUT RELIEF	HIAW 1-38	4	CLOSE	C	ACT-BOTH	P3120-75-1C	SP	10Y	
VC-28-1	VC	11 CHG PUMP DISCH RELIEF	HIAW 1-39	5	CLOSE	C	ACT-BOTH	P3120-75-11A	SP	10Y	
VC-28-2	VC	12 CHG PUMP DISCH RELIEF	HIAW 1-39	5	CLOSE	C	ACT-BOTH	P3120-75-12A	SP	10Y	
VC-28-3	VC	13 CHG PUMP DISCH RELIEF	HIAW 1-39	5	CLOSE	C	ACT-BOTH	P3120-75-13A	SP	10Y	
VC-29-1	VC	SEAL WTR HEAT EXCH #11 TO DRAIN HDR	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-29-2	VC	SEAL WTR HEAT EXCH #11 TO DRAIN HDR	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-29-3	VC	SEAL WTR HEAT EXCH #11 TO DRAIN HDR	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-3-1	VC	HOLD-UP TANK #11 INLET	HIAW 1-40	6	PERSS	EXCLUDED					
VC-3-2	VC	HOLD-UP TANK #11 OUTLET	HIAW 1-40	6	PERSS	EXCLUDED					
VC-3-4	VC	HOLD-UP TANK #121 INLET	HIAW 1-40	6	PERSS	EXCLUDED					
VC-3-5	VC	HOLD-UP TANK #121 OUTLET	HIAW 1-40	6	PERSS	EXCLUDED					
VC-3-8	VC	VOL CONT TANK #11 OUTLET	HIAW 1-39	5	OPEN	EXCLUDED					



## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
VC-30-1	VC	FR SPENT FUEL PIT PUMP TO #121 HOLD-UP TR	HIAW 1-40	6	OPEN	EXCLUDED					
VC-31-14	VC	11 SEAL WTR HT EXCH INLET PURGE CONN	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-39-1	VC	DOWNSTREAM OF CHARGING PUMP #11	HIAW 1-39	5	OPEN	EXCLUDED					
VC-39-2	VC	DOWNSTREAM OF CHARGING PUMP #12	HIAW 1-39	5	OPEN	EXCLUDED					
VC-39-3	VC	DOWNSTREAM OF CHARGING PUMP #13	HIAW 1-39	5	OPEN	EXCLUDED					
VC-42-1	VC	11 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	OPEN	EXCLUDED					
VC-42-2	VC	11 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	OPEN	EXCLUDED					
VC-42-3	VC	12 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	OPEN	EXCLUDED					
VC-42-4	VC	12 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	OPEN	EXCLUDED					
VC-43-1	VC	11 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-43-2	VC	11 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	OPEN	EXCLUDED					
VC-43-3	VC	11 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	OPEN	EXCLUDED					
VC-43-4	VC	12 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-43-5	VC	12 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	OPEN	EXCLUDED					
VC-43-6	VC	12 RCP SEAL #1 LEAKOFF	HIAW 1-38	4	OPEN	EXCLUDED					
VC-5-1	VC	CHARGING PUMP #11 DISCHARGE	HIAW 1-39	5	OPEN	EXCLUDED					
VC-5-2	VC	CHARGING PUMP #12 DISCHARGE	HIAW 1-39	5	OPEN	EXCLUDED					
VC-5-3	VC	CHARGING PUMP #13 DISCHARGE	HIAW 1-39	5	OPEN	EXCLUDED					
VC-5-4	VC	SEAL WTR INJECTION FILTERS - BY-PASS	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-6-1	VC	UPSTREAM OF SEAL WATER FILTER #11	HIAW 1-39	5	OPEN	EXCLUDED					
VC-6-2	VC	DOWNSTREAM OF SEAL WATER FILTER #11	HIAW 1-39	5	OPEN	EXCLUDED					
VC-6-3	VC	11 SEAL WTR HEAT EXCH INLET	HIAW 1-39	5	OPEN	EXCLUDED					
VC-6-30	VC	SEAL WTR FILTER #12 INLET	HIAW 1-39	5	OPEN	EXCLUDED					
VC-6-31	VC	SEAL WTR FILTER #12 OUTLET	HIAW 1-39	5	OPEN	EXCLUDED					
VC-6-4	VC	DOWNSTREAM OF SEAL WTR HEAT EXCH #11	HIAW 1-39	5	OPEN	EXCLUDED					
VC-6-5	VC	CHARGING PUMP #11 SUCTION	HIAW 1-39	5	OPEN	EXCLUDED					
VC-6-6	VC	CHARGING PUMP #12 SUCTION	HIAW 1-39	5	OPEN	EXCLUDED					
VC-6-7	VC	CHARGING PUMP #13 SUCTION	HIAW 1-39	5	OPEN	EXCLUDED					
VC-6-8	VC	SEAL WTR FILTERS #11 & #12 BY-PASS	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-6-9	VC	SEAL WTR HEAT EXCH #11 BY-PASS	HIAW 1-39	5	CLOSE	EXCLUDED					
VC-7-1	VC	1-FT-175 & 1-FT-177 BY-PASS	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-7-10	VC	1-HCV-142 BY-PASS	HIAW 1-39	5	CLOSE	A	PAS-CLOSE		PV	2Y	
VC-7-11	VC	DOWNSTREAM OF 1-HCV-142	HIAW 1-39	5	OPEN	A	ACT-CLOSE	SP-1072.12	LT	R	
VC-7-12	VC	CHARGING PUMP #12 DISCH	HIAW 1-39	5	OPEN	EXCLUDED		SP-1072.12	LT	R	
VC-7-13	VC	CHARGING PUMP #13 DISCH	HIAW 1-39	5	OPEN	EXCLUDED					
VC-7-14	VC	UPSTREAM OF SW INJECT FILTER #12	HIAW 1-39	5	OPEN	EXCLUDED					
VC-7-15	VC	DOWNSTREAM OF SW INJECT FILTER #12	HIAW 1-39	5	OPEN	EXCLUDED					
VC-7-16	VC	UPSTREAM OF SW INJECT FILTER #11	HIAW 1-39	5	OPEN	EXCLUDED					
VC-7-17	VC	DOWNSTREAM OF SW INJECT FILTER #11	HIAW 1-39	5	OPEN	EXCLUDED					
VC-7-18	VC	SEAL WATER TO #11 REACT CLNT PUMP	HIAW 1-38	4	OPEN	EXCLUDED					
VC-7-19	VC	SEAL WATER TO #12 REACT CLNT PUMP	HIAW 1-38	4	OPEN	EXCLUDED					
VC-7-2	VC	1-FT-176 & 1-FT-178 BY-PASS	HIAW 1-38	4	CLOSE	EXCLUDED					
VC-7-8	VC	CHARGING PUMP #11 DISCH	HIAW 1-39	5	OPEN	EXCLUDED					
VC-7-9	VC	UPSTREAM OF 1-HCV-142	HIAW 1-39	5	OPEN	EXCLUDED					
VC-8-1	VC	UPSTREAM OF REGENERATIVE HEAT EXCH #11	HIAW 1-38	4	OPEN	A, C	ACT-CLOSE	SP-1072.12	E	CS	
VC-8-10	VC	DOWNSTREAM OF 1-LCV-112A	HIAW 1-39	5	OPN/CLS	C	ACT-CLOSE		E	CS	
VC-8-11	VC	BORIC ACID BLENDER SUCTION	HIAW 1-39	5	OPN/CLS	C	ACT-CLOSE		E	CS	
VC-8-13	VC	DOWNSTREAM OF 1-FCV-110C	HIAW 1-39	5	OPN/CLS	EXCLUDED	NOTE 11				

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
VC-B-14	VC	RMW TO CHARGING PUMP SUCT	HIAW 1-39	5	OPN/CLS	C	ACT-CLOSE		E	CS	
VC-B-15	VC	BORIC ACID FILTER TO RMW LINE	HIAW 1-39	5	OPN/CLS	EXCLUDED	NOTE 11				
VC-B-2	VC	DWNSTRM OF REGENERATIVE HEAT EXCH #11	HIAW 1-38	4	OPN/CLS	C	ACT-CLOSE	SP-1237	E	CS	
VC-B-3	VC	11 REGEN HX AUX SPRY TO 11 PRZR CV31329	HIAW 1-38	4	OPN/CLS	C	ACT-CLOSE		E	CS	
VC-B-4	VC	RC PUMP #12 SUCTION	HIAW 1-38	4	OPEN	A, C	ACT-CLOSE	SP-1166	E	R	
								SP-1072.13B	LT	R	
VC-B-5	VC	RC PUMP #11 SUCTION	HIAW 1-38	4	OPEN	A, C	ACT-CLOSE	SP-1166	E	R	
								SP-1072.13A	LT	R	
VC-B-6	VC	RC PUMP #12 SUCTION	HIAW 1-38	4	OPEN	C	ACT-CLOSE	SP-1166	E	R	
VC-B-7	VC	RC PUMP #11 SUCTION	HIAW 1-38	4	OPEN	C	ACT-CLOSE	SP-1166	E	R	
VC-9-1	VC	11 BATP DISCH CHK VLV	HIAW 1-41	7	OPN/CLS	EXCLUDED	NOTE 11				
VC-9-2	VC	12 BATP DISCH CHK VLV	HIAW 1-41	7	OPN/CLS	EXCLUDED	NOTE 11				
CV31195	VC	BORIC ACID TANK #11 INLET	HIAW 1-41	7	OPEN	EXCLUDED	NOTE 11				
CV31197	VC	BORIC ACID TANK #121 INLET	HIAW 1-41	7	OPEN	EXCLUDED	NOTE 11				
CV31198	VC	CHG LINE HCV	HIAW 1-39	5	OPEN	A	ACT-CLOSE		E	CS	
								SP-1072.12	LT	R	
CV31199	VC	BORIC ACID FILTER TO BORIC ACID BLENDER	HIAW 1-39	5	THROT	EXCLUDED	NOTE 11				
CV31200	VC	BORIC ACID BLENDER TO VCT OUTLET	HIAW 1-39	5	CLOSE	EXCLUDED	NOTE 11				
CV31201	VC	BORIC ACID BLENDER TO VCT INLET	HIAW 1-39	5	CLOSE	EXCLUDED	NOTE 11				
CV31210	VC	EXCESS LETDOWN HEAT EXCH OUTLET	HIAW 1-38	4	OPN/CLS	B	ACT-CLOSE		E	CS	
CV31226	VC	1 REAC CLNT LOOP PZR LTDN LN ISOL	HIAW 1-7	2	OPEN	B	ACT-CLOSE	SP-1162	E	CS	
CV31255	VC	1 REAC CLNT LOOP PZR LTDN LN ISOL	HIAW 1-7	2	OPEN	B	ACT-CLOSE	SP-1162	E	CS	
CV31325	VC	LETDOWN ORIFICE ISOL	HIAW 1-38	4	BY SS	A	ACT-CLOSE	SP-1162	E	CS	
								SP-1072.11	LT	R	
CV31326	VC	LETDOWN ORIFICE ISOL	HIAW 1-38	4	BY SS	A	ACT-CLOSE	SP-1162	E	CS	
								SP-1072.11	LT	R	
CV31327	VC	LETDOWN ORIFICE ISOL	HIAW 1-38	4	BY SS	A	ACT-CLOSE	SP-1162	E	CS	
								SP-1072.11	LT	R	
CV31328	VC	11 REGEN HT EXCH CHG LN OUTLET	HIAW 1-38	4	OPEN	EXCLUDED	NOTE 11				
CV31329	VC	11 REGEN HX AUX SPRAY TO 11 PRZR	HIAW 1-38	4	CLOSE	EXCLUDED	NOTE 11				
CV31330	VC	EXCESS LETDOWN HEAT EXCH INLET	HIAW 1-38	4	OPN/CLS	B	ACT-CLOSE		E	CS	
CV31333	VC	EXCESS LETDOWN HEAT EXCH TO SL WTR FILTR	HIAW 1-38	4	BY SS	B	PAS-NOTE 2		PV	2Y	
CV31334	VC	RCP #11 & #12 TO SL WTR FILTER	HIAW 1-38	4	OPEN	EXCLUDED	NOTE 10				
CV31335	VC	RC PUMP #11 DISCH	HIAW 1-38	4	OPEN	EXCLUDED	NOTE 10				
CV31336	VC	PC PUMP #12 DISCH	HIAW 1-38	4	OPEN	EXCLUDED	NOTE 10				
CV31339	VC	LETDOWN CNTMT ISOL	HIAW 1-38	4	OPEN	A	ACT-CLOSE	SP-1162	E	CS	
								SP-1072.11	LT	R	
MV32060	VC	REF WTR STOR TK TO CHARGING PUMPS SUCT	HIAW 1-39	5	CLOSE	EXCLUDED	NOTE 11				
MV32061	VC	VOL CONT TK #11 OUTLET	HIAW 1-39	5	OPEN	EXCLUDED	NOTE 11				
MV32086	VC	EMERG BORATION TO CHG PUMP SUCTION	HIAW 1-39	5	CLOSE	EXCLUDED	NOTE 11				
MV32166	VC	SEAL RETURN CONT ISOL	HIAW 1-38	4	OPEN	A	ACT-CLOSE	SP-1280	E	CS	
								SP-1072.14	LT	R	
MV32199	VC	SEAL RETURN CONT ISOL	HIAW 1-38	4	OPEN	A	ACT-CLOSE	SP-1280	E	CS	
								SP-1072.14	LT	R	
MV32234	VC	1 RHR TO LTDN LINE MV	HIAW 1-38	4	CLOSE	EXCLUDED					
SV33184	VC	VC TK RELIEF HDRR TO WDS	HIAW 1-39	5	CLOSE	EXCLUDED	NOTE 3				
CV31434	WL	RCDT TO VENT HDR CNTMT ISOL VLV A	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-1284	E	Q	
								SP-1072.4	LT	R	
CV31435	WL	RCDT TO VENT HDR CNTMT ISOL VLV B	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-1284	E	Q	
								SP-1072.4	LT	R	
CV31436	WL	RCDT DISCH CNTMT ISOL VLV A	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-1284	E	Q	

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31437	WL	RCDT DISCH CNTMT ISOL VLV B	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-1072.5	LT	R	
CV31438	WL	SUMP A DISCH CNTMT ISOL VLV A	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-1284	E	Q	
CV31439	WL	SUMP A DISCH CNTMT ISOL VLV B	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-1072.26	LT	R	
CV31545	WL	RCDT TO GA CNTMT ISOL VLV A	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-1072.26	LT	R	
CV31546	WL	RCDT TO GA CNTMT ISOL VLV B	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-1072.21	LT	R	
ZH-1-1	ZH	121 CHILL WATER PUMP DISCHARGE	NF-39603-3	28	OPEN	EXCLUDED					
ZH-1-2	ZH	121 CHILL WTR SEP AND STRAINER INLET	NF-39603-3	28	OPEN	EXCLUDED					
ZH-1-3	ZH	121 AND 122 CHILL WATER PUMPS - DISCH X-CONN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-1-4	ZH	122 CHILL WATER PUMP DISCHARGE	NF-39603-3	28	OPEN	EXCLUDED					
ZH-1-5	ZH	122 CHILL WTR SEP AND STRAINER INLET	NF-39603-3	28	OPEN	EXCLUDED					
ZH-1-8	ZH	121 AND 122 CHILL WTR PUMP SUCTION X-CONN	NF-39603	28	OPEN	EXCLUDED					
ZH-1-9	ZH	121 AND 122 CHILL WTR PUMP SUCTION X-CONN	NF-39603	28	OPEN	EXCLUDED					
ZH-10-1	ZH	COMPUTER ROOM UNIT COOLER - (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH-11-1	ZH	WTR SUPPLY TO #121 CONTR RM CHEM FEEDER	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-11-3	ZH	WTR SUPPLY TO #121 CONTR RM CHEM FEEDER	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-11-4	ZH	WTR SUPPLY TO #122 CONTR ROOM CF - SUPPLY	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-11-6	ZH	WTR SUPPLY TO #122 CONTR ROOM CF - OUTLET	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-12-1	ZH	121 CONTROL ROOM CHILLER COOLING OUTLET	NF-39603-4	28	OPN/CLS	EXCLUDED					
ZH-12-2	ZH	122 CONTROL ROOM CHILLER COOLING OUTLET	NF-39603-4	28	OPN/CLS	EXCLUDED					
ZH-15-1	ZH	121 CHILLER OUTLET RELIEF	NF-39603-3	28	CLOSE	EXCLUDED	NOTE 3				
ZH-16-2	ZH	122 CHILLER OUTLET RELIEF	NF-39603-3	28	CLOSE	EXCLUDED	NOTE 3				
ZH-17-1	ZH	121 CONTR RM AIR COND UNIT - BY-PASS	NF-39603-3	28	OPEN	EXCLUDED					
ZH-17-2	ZH	122 CONTR RM AIR COND UNIT - BY-PASS	NF-39603-3	28	OPEN	EXCLUDED					
ZH-18-1	ZH	121 CONTR RM CHILLER - INLET	NF-39603-3	28	OPEN	EXCLUDED					
ZH-18-2	ZH	122 CONTR RM CHILLER - INLET	NF-39603-3	28	OPEN	EXCLUDED					
ZH-19-1	ZH	121 AIR SEPARATOR AND STRAINER - DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-19-2	ZH	122 AIR SEPARATOR AND STRAINER - DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-2-1	ZH	121 CHILL WATER PUMP DISCHARGE	NF-39603-3	28	OPN/CLS	EXCLUDED	ACT-OPEN	SP-1161	E	Q	
ZH-2-2	ZH	122 CHILL WATER PUMP DISCHARGE	NF-39603-3	28	OPN/CLS	EXCLUDED	ACT-OPEN	SP-1161	E	Q	
ZH-20-1	ZH	121 COND COOLER - PURGE UNIT - OUTLET	NF-39603-4	28	OPEN	EXCLUDED					
ZH-20-2	ZH	121 COND COOLER - PURGE UNIT - INLET	NF-39603-4	28	OPEN	EXCLUDED					
ZH-20-3	ZH	122 COND COOLER - PURGE UNIT - INLET	NF-39603-4	28	OPEN	EXCLUDED					
ZH-20-4	ZH	122 COND COOLER - PURGE UNIT - OUTLET	NF-39603-4	28	OPEN	EXCLUDED					
ZH-22-1	ZH	LOOP A AND B CW SUPPLY HDRS - X-CONN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-22-2	ZH	LOOP A AND B CW SUPPLY HDRS - X-CONN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-23-1	ZH	LOOP A CW SUPPLY HDRS - CROSS-CONN	NF-39603-3	28	OPN/CLS	EXCLUDED	ACT-OPEN	SP-1161	E	Q	
ZH-23-2	ZH	LOOP B CW SUPPLY HDRS - CROSS-CONN	NF-39603-3	28	OPN/CLS	EXCLUDED	ACT-OPEN	SP-1161	E	Q	
ZH-24-1	ZH	122 CONTROL RM AIR HANDLER CW DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-24-2	ZH	122 CONTROL RM AIR HANDLER CW VENT	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-3-1	ZH	121 CONTROL ROOM AIR COND SUPPLY	NF-39603-3	28	OPEN	EXCLUDED					
ZH-3-2	ZH	121 CONTROL ROOM AIR COND RETURN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-3-3	ZH	122 CONTROL ROOM AIR COND RETURN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-3-4	ZH	122 CONTROL ROOM AIR COND SUPPLY	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-1	ZH	101 SWITCHGR UNIT COOLER SUPPLY (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-10	ZH	11 RESID HT REM PIT UNIT COOLER RETURN	NF-39603-3	28	OPEN	EXCLUDED					

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
ZH-4-11	ZH	12 RESID HT REM PIT UNIT COOLER SUPPLY	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-12	ZH	12 RESID HT REM PIT UNIT COOLER RETURN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-13	ZH	121-S RELAY ROOM UNIT COOLER SUPPLY	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-14	ZH	121-S RELAY ROOM UNIT COOLER RETURN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-15	ZH	121-N RELAY ROOM UNIT COOLER SUPPLY	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-16	ZH	121-N RELAY ROOM UNIT COOLER RETURN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-17	ZH	122-S RELAY ROOM UNIT COOLER SUPPLY	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-18	ZH	122-S RELAY ROOM UNIT COOLER RETURN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-19	ZH	122-N RELAY ROOM UNIT COOLER SUPPLY	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-20	ZH	122-N RELAY ROOM UNIT COOLER RETURN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-21	ZH	121 PURGE/OIL PMP/MTR UNIT CLR CHILL WTR INLT	NF-39603-4	28	OPEN	EXCLUDED					
ZH-4-22	ZH	122 PURGE/OIL PMP/MTR UNIT CLR CHILL WTR INLT	NF-39603-4	28	OPEN	EXCLUDED					
ZH-4-23	ZH	102A SFGD SWGR UNIT COOLER INLET	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-24	ZH	102A SFGD SWGR UNIT COOLER OUTLET	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-3	ZH	102 SWITCHGR UNIT COOLER SUPPLY (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-4	ZH	102 SWITCHGR UNIT COOLER RETURN (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-5	ZH	15 SWITCHGR UNIT COOLER SUPPLY - TURB BLDG	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-6	ZH	15 SWITCHGR UNIT COOLER RETURN - TURB BLDG	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-7	ZH	16 SWITCHGR UNIT COOLER SUPPLY - TURB BLDG	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-8	ZH	16 SWITCHGR UNIT COOLER RETURN - TURB BLDG	NF-39603-3	28	OPEN	EXCLUDED					
ZH-4-9	ZH	11 RESID HT REM PIT UNIT COOLER SUPPLY	NF-39603-3	28	OPEN	EXCLUDED					
ZH-5-1	ZH	COMPUTER ROOM UNIT COOLER SUPPLY	NF-39603-3	28	OPEN	EXCLUDED					
ZH-5-2	ZH	COMPUTER ROOM UNIT COOLER RETURN	NF-39603-3	28	OPEN	EXCLUDED					
ZH-5-3	ZH	121 CHILLER BLOWER MOTOR UNIT CLR - SUPPLY	NF-39603-4	28	OPEN	EXCLUDED					
ZH-5-4	ZH	122 CHILLER BLOWER MOTOR UNIT CLR - SUPPLY	NF-39603-4	28	OPEN	EXCLUDED					
ZH-6-1	ZH	101 SWITCHGEAR UNIT COOLER - INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-10	ZH	121 N-CLAY ROOM UNIT COOLER INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-11	ZH	122 N-CLAY ROOM UNIT COOLER INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-12	ZH	121 CHILLER CONDENSER INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-15	ZH	122 CHILLER CONDENSER INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-17	ZH	DEMIN WATER AT 121 EXPNTN TANK	NF-39603-4	28	OPEN	EXCLUDED					
ZH-6-18	ZH	DEMIN WTR SUPPLY TO 121 PURGE UNIT	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-19	ZH	121 PURGE UNIT - DRAIN TO WASTE	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-2	ZH	102 SWITCHGEAR UNIT COOLER - INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-21	ZH	DEMIN WTR SUPPLY AT #122 PURGE UNIT	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-22	ZH	122 PURGE UNIT - DRAIN TO WASTE	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-24	ZH	122 PURGE UNIT - DRAIN TO WASTE	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-25	ZH	AUX BLDG SWITCHGR UNIT CLRS SUPPLY - VENT	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-26	ZH	AUX BLDG SWITCHGR UNIT CLRS RETURN - VENT	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-27	ZH	SUPPLY TO CHILLER #121 BLOWER MTR - VENT	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-28	ZH	RETURN TO CHILLER #121 BLOWER MTR - VENT	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-29	ZH	SUPPLY TO CHILLER #122 BLOWER MTR - VENT	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-3	ZH	15 SWITCHGR UNIT CLR - (TURB BLDG) INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-30	ZH	RETURN TO CHILLER #122 BLOWER MTR - VENT	NF-39603-4	28	CLOSE	EXCLUDED					
ZH-6-31	ZH	LINE DRAIN - NEAR CV-31838	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-32	ZH	LINE DRAIN - NEAR CV-31837	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-39	ZH	VENT - SG #201 VC TO 3 - CW SUPPLY HDR	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-4	ZH	16 SWITCHGR UNIT CLR - (TURB BLDG) INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-40	ZH	VENT - SG #201 VC TO 4 - CW RETURN HDR	NF-39603-3	28	CLOSE	EXCLUDED					
ZH-6-41	ZH	102A SFGD SWGR UNIT COOLER DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					



Valve Number	Sys	Description	P&ID	Code Dwg	Normal Posn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
ZH 6-5	ZH	11 RESID HT REM PIT UNIT COOLER INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH 6-6	ZH	12 RESID HT REM PIT UNIT COOLER INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH 6-7	ZH	COMPUTER ROOM UNIT COOLER INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH 6-8	ZH	121 S RELAY RM UNIT COOLER INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH 6-9	ZH	122 S RELAY ROOM UNIT COOLER INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED					
ZH 7-3	ZH	121 CONTR RM CHEM FEEDER	NF-39603-3	28	OPEN	EXCLUDED					
ZH 7-4	ZH	122 CONTR RM CHEM FEEDER	NF-39603-3	28	OPEN	EXCLUDED					
ZH 8-1	ZH	121 CONTROL ROOM AIR COND UNIT	NF-39603-3	28	OPEN	EXCLUDED					
ZH 8-2	ZH	122 CONTROL ROOM AIR COND UNIT	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-1	ZH	101 SWITCHGEAR UNIT COOLER (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-10	ZH	122-N RELAY ROOM UNIT COOLER - (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-2	ZH	102 SWITCHGEAR UNIT COOLER (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-3	ZH	15 SWITCHGEAR UNIT COOLER - (TURB BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-4	ZH	16 SWITCHGEAR UNIT COOLER - (TURB BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-5	ZH	11 RESID HT REM PIT UNIT COOLER (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-6	ZH	12 RESID HT REM PIT UNIT COOLER (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-7	ZH	121 RELAY ROOM UNIT COOLER - (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-8	ZH	121-N RELAY ROOM UNIT COOLER - (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
ZH 9-9	ZH	122 S RELAY ROOM UNIT COOLER - (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED					
CV31753	ZH	#12 RESID HT REM PIT UNIT COOLER OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31754	ZH	#11 RESID HT REM PIT UNIT COOLER OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31757	ZH	#16 SWITCHGEAR (TURB BLDG) UNIT CLR OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31758	ZH	#15 SWITCHGEAR (TURB BLDG) UNIT CLR OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31759	ZH	#122-N RELAY RM (AUX BLDG) UNIT CLR OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31760	ZH	#121-N RELAY RM (AUX BLDG) UNIT CLR OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31761	ZH	#122 S RELAY RM (AUX BLDG) UNIT CLR OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31762	ZH	#121 S RELAY RM (AUX BLDG) UNIT CLR OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31763	ZH	COMPUTER RM (AUX BLDG) UNIT CLR OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31767	ZH	#101 SWITCHGEAR (AUX BLDG) UNIT CLR OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31768	ZH	#122 CONTROL RM AIR COND OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31768	ZH	#121 CONTROL RM AIR OUTLET	NF-39603-3	28	MOD	EXCLUDED					
CV31768	ZH	102A SFGD SWGR FAN COIL UNIT CLR TEMP COMT	NF-39603-3	28	MOD	EXCLUDED					
CV31937	ZH	121/122 CNTRL RM WTR CHLLR OUTLET X-OVER	NF-39603-3	28	OPEN	B	ACT-CLOSE	SP-1160	E	Q	
CV31938	ZH	121/122 CNTRL RM WTR CHLLR INLET X-OVER	NF-39603-3	28	OPEN	B	ACT-CLOSE	SP-1160	E	Q	
SV33716	ZH	122 CONTR RM CHLLR CLG WTR SV	NF-39603-3	28	OPEN	EXCLUDED					
SV33717	ZH	121 CONTR RM CHLLR CLG WTR SV	NF-39603-3	28	OPEN	EXCLUDED					
SV33728	ZH	121 CONTROL ROOM WTR CHLLR MTR CLR	NF-39603-4	28	CLOSE	B	ACT-OPEN	SP-1161	E	Q	
SV33766	ZH	122 CONTROL ROOM WTR CHLLR MTR CLR	NF-39603-4	28	CLOSE	B	ACT-OPEN	SP-1161	E	Q	
CV31310	ZP	INSERVICE PURGE EXH IFOL B	NF-39601-1	N/A	FLANGED	A	ACT-CLOSE		LT	R	
CV31311	ZP	INSERVICE PURGE EXH ISOL A	NF-39601-1	N/A	FLANGED	A	ACT-CLOSE		E	AR	
CV31621	ZP	CNTMT VAC BRKR PWR OP	NF-39602-1	N/A	CLOSE	A	ACT-BOTH	SP-1130	LT	R	
CV31622	ZP	CNTMT VAC BRKR PWR OP	NF-39602-1	N/A	CLOSE	A	ACT-BOTH	SP-1072 41A	E	Q	
CV31624	ZP	CNTMT VAC BRKR GRAV OP	NF-39602-1	N/A	CLOSE	A	ACT-BOTH	SP-1072 41B	LT	R	
CV31625	ZP	CNTMT VAC BRKR GRAV OP	NF-39602-1	N/A	CLOSE	A, C	ACT-BOTH	SP-1130	E	Q	
CV31625	ZP	CNTMT VAC BRKR GRAV OP	NF-39602-1	N/A	CLOSE	A, C	ACT-BOTH	SP-1072 41A	LT	R	
CV31633	ZP	INSERVICE PURGE SUPPLY ISOL B	NF-39601-1	N/A	FLANGED	A	ACT-CLOSE	SP-1130	E	Q	
CV31633	ZP	INSERVICE PURGE SUPPLY ISOL B	NF-39601-1	N/A	FLANGED	A	ACT-CLOSE	SP-1072 41B	LT	R	

## ASME SECTION XI VALVES UNIT 1

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request
CV31634	ZP	INSERVICE PURGE SUPPLY ISOL A	NF-39601-1	N/A	FLANGED	A	ACT-CLOSE		LT	R	
CV39401	ZX	COOLING WATER TO 11 & 13 FCU	NF-86172-2	41	BY SS	B	ACT-OPEN	SP-1245	E	Q	
CV39402	ZX	11& 13 FCU CHILLED WATER SUPPLY CV	NF-86172-2	41	BY SS	B	ACT-CLOSE	SP-1245	E	Q	
CV39403	ZX	COOLING WATER TO 12 & 14 FCU	NF-86172-2	41	BY SS	B	ACT-OPEN	SP-1245	E	Q	
CV39404	ZX	12& 14 FCU CHILLED WATER SUPPLY CV	NF-86172-2	41	BY SS	B	ACT-CLOSE	SP-1245	E	Q	
CV39405	ZX	11 SHROUD CLG COILS TR A CW SUPPLY CV	NF-86172-1	41	OPEN	B	ACT-CLOSE	SP-1245	E	Q	
CV39406	ZX	12 SHROUD CLG COILS TR B CW SUPPLY CV	NF-86172-1	41	OPEN	B	ACT-CLOSE	SP-1245	E	Q	
CV39407	ZX	11 SHROUD CLG COILS TR A CW SUPPLY CV	NF-86172-1	41	OPEN	B	ACT-CLOSE	SP-1245	E	Q	
CV39408	ZX	12 SHROUD CLG COILS TR B CW SUPPLY CV	NF-86172-1	41	OPEN	B	ACT-CLOSE	SP-1245	E	Q	
CV39409	ZX	COOLING WATER FROM 11 & 13 FCU	NF-86172-2	41	BY SS	B	ACT-OPEN	SP-1245	E	Q	
CV39410	ZX	12& 14 FCU CHILLED WATER SUPPLY CV	NF-86172-2	41	BY SS	B	ACT-CLOSE	SP-1245	E	Q	
CV39411	ZX	COOLING WATER FROM 12 & 14 FCU	NF-86172-2	41	BY SS	B	ACT-OPEN	SP-1245	E	Q	
CV39412	ZX	11& 13 FCU CHILLED WATER SUPPLY CV	NF-86172-2	41	BY SS	B	ACT-CLOSE	SP-1245	E	Q	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code	Normal Posn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2AF-13-1	2AF	12 & 21 AUX FW PUMPS DISCH X - CONN	NF-39223	38	CLOSE	B	ACT-BOTH	SP-1730	E	CS		See Deferral Note J
2AF-18-13	2AF	12 AUX FDWTR PUMP CASING DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
2AF-18-14	2AF	22 AUX FDWTR PUMP CASING DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
2AF-29-1	2AF	21 AUX FD PUMP SUCT RELIEF	NF-39223	38	CLOSE	C	ACT-BOTH	P3120-1-21A	SP	10Y		
2AF-29-2	2AF	22 AUX FD PUMP SUCT RELIEF	NF-39223	38	CLOSE	C	ACT-BOTH	P3120-1-22A	SP	10Y		
2AF-30-1	2AF	46A PENETRATION - LEAK - TEST	NF-39223	38	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2AF-30-2	2AF	46B PENETRATION - LEAK - TEST	NF-39223	38	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2AF-31-1	2AF	CHEM FEED ISOL TO 22 SG	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
2AF-31-2	2AF	CHEM FEED ISOL TO 21 SG	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
2AF-32-1	2AF	MV32247 DISCHARGE LINE DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2AF-32-2	2AF	MV32246 DISCHARGE LINE DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
AF-12-3	2AF	AUX FW TO 22 STM GEN ISOL	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-12-4	2AF	AUX FW TO 21 STM GEN ISOL	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-13-5	2AF	21 AUX FW PUMP DISCH	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-13-6	2AF	22 AUX FW PUMP DISCH	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-14-5	2AF	21 AUX FW PUMP SUCTION CHECK	NF-39223	38	OPN/CLS	C	ACT-OPEN		E	CS		See Deferral Note A
AF-14-7	2AF	22 AUX FW PUMP SUCTION CHECK	NF-39223	38	OPN/CLS	C	ACT-OPEN		E	CS		See Deferral Note A
AF-15-11	2AF	21 AUX FW PUMP DISCH CHECK	NF-39223	38	OPN/CLS	C	ACT-BOTH		E	CS		See Deferral Note A
AF-15-12	2AF	22 AUX FW PUMP DISCH CHECK	NF-39223	38	OPN/CLS	C	ACT-BOTH		E	CS		See Deferral Note A
AF-15-5	2AF	AUX FW TO STM GEN 22 CHECK	NF-39223	38	OPN/CLS	C	ACT-BOTH		E	CS		See Deferral Note A
AF-15-6	2AF	AUX FW TO STM GEN 22 CHECK	NF-39223	38	OPN/CLS	C	ACT-BOTH		E	CS		See Deferral Note A
AF-15-7	2AF	AUX FW TO STM GEN 21 CHECK	NF-39223	38	OPN/CLS	C	ACT-BOTH		E	CS		See Deferral Note A
AF-15-8	2AF	AUX FW TO STM GEN 21 CHECK	NF-39223	38	OPN/CLS	C	ACT-BOTH		E	CS		See Deferral Note A
AF-16-3	2AF	AUX FW TO 22 STM GEN ISOL CHECK	NF-39223	38	OPN/CLS	C	ACT-BOTH		E	CS		See Deferral Note A
AF-16-4	2AF	AUX FW AT 21 STM GEN ISOL CHECK	NF-39223	38	OPN/CLS	C	ACT-BOTH		E	CS		See Deferral Note A
AF-17-3	2AF	21 AUX FW PUMP MIN FLOW BY-PASS	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
AF-17-4	2AF	22 AUX FW PUMP MIN FLOW BY-PASS	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
AF-18-10	2AF	DRAIN DOWNSTREAM OF MV-39244	NF-39223	38	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
AF-18-11	2AF	DRAIN DOWNSTREAM OF FI-18033	NF-39223	38	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
AF-18-5	2AF	21 AUX FW PUMP RECIRC LUBE OIL COOLING ISOL	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-18-6	2AF	22 AUX FW PUMP RECIRC LUBE OIL COOLING ISOL	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-18-7	2AF	DRAIN DOWNSTREAM OF MV-32384	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-18-8	2AF	CHEM FEED INLET TO 21 SG	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-18-9	2AF	CHEM FEED INLET TO 22 SG	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-19-7	2AF	21 AUX FW PUMP DISCH LINE DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
AF-19-8	2AF	22 AUX FW PUMP DISCH LINE DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
AF-21-3	2AF	21 AUX FDWTR PUMP SUCT DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
AF-21-4	2AF	22 AUX FDWTR PUMP SUCT DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
AF-21-7	2AF	21 AUX FD PUMP SUCT VENT	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
AF-21-8	2AF	22 AUX FD PUMP SUCT VENT	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
AF-26-10	2AF	22 AFWP TURB LUBE OIL CLG WTR SUPPLY	NF-39223	38	OPEN	EXCLUDED						Valve used for system or component maintenance
AF-26-8	2AF	22 AFWP RECIRC LINE OIL COOLER OLT TO DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
AF-26-9	2AF	22 AFWP RECIRC LINE OIL COOLER OLT TO DRAIN	NF-39223	38	CLOSE	EXCLUDED						Valve used for system or component maintenance
AF-28-3	2AF	21 AUX FW PUMP RECIRC LINE CHECK	NF-39223	38	OPN/CLS	C	ACT-OPEN		E	Q		
AF-28-4	2AF	22 AUX FW PUMP RECIRC LINE CHECK	NF-39223	38	OPN/CLS	C	ACT-OPEN		E	Q		
AF-28-7	2AF	22 AUX FW PMP TURB DRIVEN DOWNSTREAM	NF-39223	38	OPN/CLS	EXCLUDED	NOTE 7					Valve used for system or component maintenance
AF-28-8	2AF	21 AUX FW PMP MOTOR DRIVEN DOWNSTREAM	NF-39223	38	OPN/CLS	EXCLUDED	NOTE 7					Valve used for system or component maintenance
AF-34-2	2AF	22 AUX FW TURB BRG CLG WATER RELIEF	NF-39223	38	OPEN	EXCLUDED	NOTE 3	P3120-1-22B	SP	10Y		
2CF-11-1	2AF	CHEM ADD TO AFW	NF-39240	38	BOTH	EXCLUDED						Valve used for system or component maintenance
2CF-11-2	2AF	CHEM ADD TO AFW	NF-39240	38	BOTH	EXCLUDED						Valve used for system or component maintenance
CV31418	2AF	21 TD AFWP RECIRC LUBE OIL CLG CV	NF-39223	38	CLOSE	B	ACT-OPEN	SP-2100	E	Q		
CV31419	2AF	22 MD AFWP RECIRC LUBE OIL CLG CV	NF-39223	38	CLOSE	B	ACT-OPEN	SP-2102	E	Q		
MV32246	2AF	AUX FW TO #21 STM GEN	NF-39223	38	OPEN	B	ACT-BOTH	SP-2102	E	Q		

Valve Number	Sys Description	P&ID	Code Dwg	Normal Positin	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
MV32247	2AF AUX FW TO #22 STM GEN	NF-39223	38	OPEN	B	ACT-BOTH	SP-2102	E	Q		
MV32248	2AF AUX FW TO 21 STM GEN ISOL MV	NF-39223	38	OPEN	B	PAS-OPEN		PV	2Y		
MV32249	2AF AUX FW TO 22 STM GEN ISOL MV	NF-39223	38	OPEN	B	PAS-OPEN		PV	2Y		
MV32336	2AF 21 AUX FW PUMP SUCTION	NF-39223	38	OPEN	B	ACT-BOTH	SP-2100	E	Q		
MV32345	2AF 22 AUX FW PUMP SUCTION	NF-39223	38	OPEN	B	ACT-BOTH	SP-2102	E	Q		
MV32363	2AF AUX FW TO 21 STM GEN	NF-39223	38	OPEN	B	ACT-BOTH	SP-2100	E	Q		
MV32384	2AF AUX FW TO 22 STM GEN	NF-39223	38	OPEN	B	ACT-BOTH	SP-2100	E	Q		
ZCA-1-1	2CA CAUSTIC ADD TRAIN A TO #21 & #22 CS PUMPS	NF-39252	18	OPEN	EXCLUDED						Valve used for system or component maintenance
ZCA-1-2	2CA CAUSTIC ADD TRAIN A TO #21 & #22 CS PUMPS	NF-39252	18	OPEN	EXCLUDED						Valve used for system or component maintenance
ZCA-1-3	2CA CAUSTIC ADD TRAIN B TO #21 & #22 CS PUMPS	NF-39252	18	OPEN	EXCLUDED						Valve used for system or component maintenance
ZCA-1-4	2CA CAUSTIC ADD TRAIN B TO #21 & #22 CS PUMPS	NF-39252	18	OPEN	EXCLUDED						Valve used for system or component maintenance
ZCA-11-1	2CA CAUSTIC ADDITION TO #21 & #22 CS PUMPS OHK	NF-39252	18	OPEN	C	ACT-BOTH		E	R		See Deferral Note K
ZCA-12-1	2CA LINE VENT DOWNSTREAM OF VALVE 2CA-11-1	NF-39252	18	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
ZCA-15-1	2CA LINE DRAIN - DOWNSTREAM OF 2CA-11-1	NF-39252	18	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
ZCA-16-1	2CA TRAIN A DEMIN WTR FLUSH COIN	NF-39252	18	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
ZCA-16-2	2CA TRAIN B DEMIN WTR FLUSH COIN	NF-39252	18	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
ZCA-4-2	2CA ISOLATION VALVE - TRAIN A TO 55 GAL DRUM	NF-39252	18	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
ZCA-4-3	2CA ISOLATION VALVE - TRAIN B TO 55 GAL DRUM	NF-39252	18	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
ZCA-6-2	2CA LINE VENT - UPSTREAM OF CV-31940	NF-39252	18	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
ZCA-6-3	2CA LINE VENT - UPSTREAM OF CV-31939	NF-39252	18	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
ZCA-9-1	2CA 21 CAUSTIC ADDITION RECUR PUMP SUCTION	NF-39252	18	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CV31939	2CA 22 CS SUPT PUMP FROM NaOH STORAGE ISOL	NF-39252	18	CLOSE	B	ACT-OPEN	SP-2090	E	Q		Valve used for system or component maintenance
CV31940	2CA 21 CS PUMP SUCT FROM NaOH STORAGE ISOL	NF-39252	18	CLOSE	B	ACT-OPEN	SP-2090	E	Q		Valve used for system or component maintenance
ZOC-1-1	2OC 21 COMP CLG PMP SUCT	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-1-10	2OC RETURN LINE TO 22 COMP COOLING PMP	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-1-11	2OC 21 & 22 COMP CLG PUMPS SUCT CROSS COIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for system or component maintenance
ZOC-1-12	2OC 21 & 22 COMP CLG PUMPS SUCT CROSS COIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for system or component maintenance
ZOC-1-13	2OC 21 & 22 COMP CLG PUMPS DISCH CROSS COIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for system or component maintenance
ZOC-1-14	2OC 21 & 22 COMP CLG PUMPS DISCH CROSS COIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for system or component maintenance
ZOC-1-2	2OC 22 COMP CLG PMP SUCT	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-1-3	2OC 21 COMP CLG PMP DISCH	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-1-4	2OC 22 COMP CLG PMP DISCH	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-1-5	2OC 21 COMP CLG HT EXGR INLET	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-1-6	2OC 22 COMP CLG HT EXGR INLET	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-1-7	2OC 21 COMP CLG HT EXGR OUTLET	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-1-8	2OC 22 COMP CLG HT EXGR OUTLET	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-1-9	2OC RETURN LINE TO 21 COMP COOLING PMP	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-14-5	2OC 21 RCP BRG CLG WTR RETURN OHK	NF-39246-1	39	OPEN	C	ACT-BOTH		E	CS		See Deferral Note K
ZOC-14-6	2OC 22 RCP BRG CLG WTR RETURN OHK	NF-39246-1	39	OPEN	C	ACT-BOTH		E	CS		See Deferral Note K
ZOC-18-1	2OC 22 REACT CLNT PUMP BRG CLG WTR RET OHK	NF-39246-1	39	OPEN	C	ACT-BOTH		E	CS		See Deferral Note K
ZOC-18-2	2OC 21 REACT CLNT PUMP BRG CLG WTR RET OHK	NF-39246-1	39	OPEN	C	ACT-BOTH		E	CS		See Deferral Note K
ZOC-19-1	2OC 21 COMPONENT CLG SURGE TANK OUTLET	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-21-2	2OC 22 REACT CLNT PUMP BRG WTR SUPPLY	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
ZOC-21-3	2OC 21 REACT CLNT PUMP BRG WTR SUPPLY	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
ZOC-22-1	2OC 22 REACT CLNT PUMP BRG CLG WTR RET	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
ZOC-22-2	2OC 21 REACT CLNT PUMP BRG CLG WTR RET	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
ZOC-23-1	2OC 21 EXCESS LETDOWN HT EXCH INLET OHK	NF-39246-1	39	OPEN	C	ACT-CLOSE		E	CS		See Deferral Note L
ZOC-24-1	2OC 21 EXCESS LETDOWN HT EXCH INLET OHK	NF-39246-1	39	CLOSE	C	ACT-CLOSE		E	CS		See Deferral Note L
ZOC-26-1	2OC 21 OC SURGE TANK DRAIN TO WASTE HU TANK	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for system or component maintenance
ZOC-27-8	2OC 21 OC SURGE TANK X-TIE ISOL	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
ZOC-3-1	2OC 21 COMP COOLING PUMP DISCH OHK	NF-39246-1	39	OPEN	C	ACT-OPEN	SP-2155	E	Q		
ZOC-3-2	2OC 22 COMP COOLING PUMP DISCH OHK	NF-39246-1	39	OPEN	C	ACT-OPEN	SP-2155	E	Q		
ZOC-3-3	2OC RET LINE TO #21 COMP COOLING PUMP OHK	NF-39246-1	39	OPEN	C	ACT-BOTH		E	CS		See Deferral Note A



## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
20C-3-4	20C	RET LINE TO #22 COMP COOLING PUMP CHK	NF-39246-1	39	OPEN	C	ACT-BOTH		E	CS		See Deferral Note A
20C-30-1	20C	22 SI PUMP SEAL HT EXCH & STUFF BOX SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-10	20C	21 RESID HT REM PUMP HT EXCH RETURN	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
20C-30-13	20C	22 COMPONENT CLG PU RECIRC LINE	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-14	20C	21 COMPONENT CLG PU RECIRC LINE	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-15	20C	21 CS PUMP HT EXCH SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-16	20C	22 CS PUMP HT EXCH RETURN	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-17	20C	21 CS PUMP HT EXCH RETURN	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-18	20C	22 CS PUMP HT EXCH SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-2	20C	22 SI PUMP SEAL HT EXCH & STUFF BOX RETURN	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
20C-30-3	20C	22 SI PUMP SEAL HT EXCH & STUFF BOX RETURN	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
20C-30-4	20C	21 SI PUMP SEAL HT EXCH & STUFF BOX SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-5	20C	21 SI PUMP SEAL HT EXCH & STUFF BOX RETURN	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
20C-30-6	20C	21 SI PUMP SEAL HT EXCH & STUFF BOX RETURN	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-7	20C	22 RESID HT REM PUMP HT EXCH SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-30-8	20C	22 RESID HT REM PUMP HT EXCH RETURN	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
20C-30-9	20C	21 RESID HT REM PUMP HT EXCH SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-31-1	20C	22 REACT CLNT PUMP BRG CLG WTR SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-31-2	20C	21 REACT CLNT PUMP BRG CLG WTR SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-31-3	20C	21 COMP CLG HT EXCH OUTLET TO RAD MONITOR	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-31-4	20C	22 COMP CLG HT EXCH OUTLET TO RAD MONITOR	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-32-1	20C	22 RCP BRG CLG WTR RETURN	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-32-2	20C	21 RCP BRG CLG WTR RETURN	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-33-10	20C	22 RESID HT EXCH DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-11	20C	21 RESID HT EXCH DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-16	20C	21 SAFETY INJ PUMP CLG WTR SUPPLY DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-17	20C	22 SAFETY INJ PUMP CLG WTR SUPPLY DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-18	20C	21 SAFETY INJ PUMP CLG WTR RETURN DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-19	20C	22 SAFETY INJ PUMP CLG WTR RETURN DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-22	20C	12 " COMP CLG WTR SUPPLY HDR VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-23	20C	12 " COMP CLG WTR SUPPLY HDR VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-26	20C	10 " RET HDR FROM 21 RESID HT EXCH LINE VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-27	20C	10 " RET HDR FROM 22 RESID HT EXCH LINE VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-29	20C	21 RESID HT EXCH VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-3	20C	21 OC SURGE TNK GAGE GLASS	NF-39246-1	39	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-30	20C	22 RESID HT EXCH VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-31	20C	21 COMP CLG PUMP SUCTION LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-32	20C	22 COMP CLG PUMP SUCTION LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-33	20C	21 COMP CLG PUMP DISCH LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-34	20C	21 COMP CLG PUMP DISCH LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-35	20C	22 COMP CLG PUMP DISCH LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-36	20C	22 COMP CLG PUMP DISCH LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-37	20C	21 & 22 COMP CLG PUMP DISCH X-CONN DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-38	20C	21 COMP CLG PUMP DISCH LINE VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-39	20C	22 COMP CLG PUMP DISCH LINE VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-4	20C	21 OC SURGE TNK GAGE GLASS	NF-39246-1	39	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-40	20C	21 OC HX DISCH DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-41	20C	22 OC HX DISCH DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-43	20C	21 EXCESS LETDOWN HT EXCH SUPPLY -VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-44	20C	21 EXCESS LETDOWN HT EXCH SUPPLY -DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-46	20C	22 EXCESS LETDOWN HT EXCH SUPPLY -VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-48	20C	21 EXCESS LETDOWN HT EXCH DISCH -VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-5	20C	21 COMP CLG SURGE TANK LOCAL SAMPLE	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
20C-33-50	20C	21 REACT CLNT PUMP BRG CLG SUPPLY VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-51	20C	21 REACT CLNT PUMP BRG CLG SUPPLY DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-52	20C	21 COMP CLG PUMP CASING DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-53	20C	22 COMP CLG PUMP CASING DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-59	20C	22 REACT CLNT PUMP BRG CLG SUPPLY VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-60	20C	22 REACT CLNT PUMP BRG CLG SUPPLY DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-61	20C	22 RCP BRG CLG SUPPLY VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-64	20C	22 RCP UPPER BRG CLG DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-69	20C	12 RET TO COMP COOLING PUMP 21 VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-70	20C	SURGE TO 21 COMP CLG SURGE TK DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-71	20C	COMP CLG PUMPS SUCTION CROSS CONN VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-72	20C	10" RETURN FROM 22 RESID HT EXCH VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-73	20C	21 RESID HT REM PUMP RETURN VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-74	20C	21 SAFETY INJ PUMP SUPPLY DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-75	20C	22 SAFETY INJ PUMP RETURN VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-76	20C	22 CNTMT SPRAY PUMP SL WTR CLR-RET VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-92	20C	21 REACT CLNT PUMP BRG SUPPLY LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-93	20C	21 REACT CLNT PUMP BRG DISCH LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-95	20C	22 REACT CLNT PUMP BRG CLG SUPPLY DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-96	20C	22 REACT CLNT PUMP BRG WTR DISCH DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-33-97	20C	21 EXCESS LETDOWN HT EXCH DISCHARGE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-34-43	20C	21 RC CLNT PUMP SUPPLY LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-34-45	20C	21 EXCESS LETDOWN HT EX SUPPLY VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-34-6	20C	21 EXCESS LETDOWN HT EXCH DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-35-1	20C	22 RESID HT REM PUMP SUPPLY TO STUFF BOX	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-35-10	20C	21 CNTMT SPRAY PUMP HT EXCH RETURN	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
20C-35-11	20C	22 CNTMT SPRAY PUMP HT EXCH SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-35-12	20C	22 CNTMT SPRAY PUMP HT EXCH RETURN	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
20C-35-13	20C	21 RESID HT REM PUMP CLG RET-LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-35-14	20C	22 RESID HT REM PUMP CLG RET-LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-35-15	20C	SEAL WTR COOLER DISCH LINE VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-35-16	20C	21 CNTMT SPRAY PUMP HT EXCH DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-35-17	20C	22 CNTMT SPRAY PUMP HT EXCH DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-35-2	20C	22 RESID HT REM PUMP SUPPLY TO HT EXCH	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-35-3	20C	22 RHR PUMP RETURN FROM STUFF BOX	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-35-4	20C	22 RHR PUMP RETURN FROM HT EXCH	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-35-5	20C	21 RHR PUMP SUPPLY TO STUFF BOX	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-35-6	20C	21 RHR PUMP SUPPLY TO HT EXCH	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-35-7	20C	21 RHR PUMP RETURN FROM STUFF BOX	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-35-8	20C	21 RHR PUMP RETURN FROM HT EXCH	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-35-9	20C	21 CNTMT SPRAY PUMP HT EXCH SUPPLY	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-36-3	20C	22 REACTOR COOLANT PUMP LWR BRG RET	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-36-4	20C	21 REACTOR COOLANT PUMP LWR BRG RET	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system or component maintenance
20C-37-1	20C	21 COMP CLG HT EXCH RELIEF	NF-39246-1	39	CLOSE	EXCLUDED	NOTE 3					
20C-37-14	20C	21 EXCESS LETDOWN HEAT EXCH RELIEF	NF-39246-1	39	CLOSE	EXCLUDED	NOTE 3					
20C-37-2	20C	22 COMP CLG HT EXCH RELIEF	NF-39246-1	39	CLOSE	EXCLUDED	NOTE 3					
20C-38-1	20C	21 RESIDUAL HEAT EXCH RELIEF	NF-39246-1	39	CLOSE	EXCLUDED	NOTE 3					
20C-38-2	20C	22 RESIDUAL HEAT EXCH RELIEF	NF-39246-1	39	CLOSE	EXCLUDED	NOTE 3					
20C-5-1	20C	RET LINE TO #21 COMP COOLING PUMP CHECK	NF-39246-1	39	OPEN	C	ACT-BOTH		E	CS		See Deferral Note A
20C-5-2	20C	RET LINE TO #22 COMP COOLING PUMP CHECK	NF-39246-1	39	OPEN	C	ACT-BOTH		E	CS		See Deferral Note A
20C-57-1	20C	21 RCP BRG CLG WTR DISCH VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-57-2	20C	22 RCP BRG CLG WTR DISCH VENT	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-60-1	20C	21 RCP BRG CLG WTR OUTLET RELIEF	NF-39246-1	39	CLOSE	EXCLUDED	NOTE 3					

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positm	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
20C-60-2	20C	22 RCP BRG CLG WTR OUTLET RELIEF	NF-39246-1	39	CLOSE	EXCLUDED	NOTE 3					
20C-61-1	20C	EMG SUPPLY TO 21 & 22 RC PUMPS BRG CLG CHK	NF-39246-1	39	OPNCLS	C	ACT-BOTH		E	CS		See Deferral Note K
20C-61-2	20C	EMG SUPPLY TO 21 & 22 RC PUMPS BRG CLG CHK	NF-39246-1	39	OPNCLS	C	ACT-BOTH		E	CS		See Deferral Note K
20C-68-4	20C	21 RC PUMP BRG CLG RET-LINE DRAIN	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-69-1	20C	21 RC PUMP BRG CLG WTR-RELIEF	NF-39246-1	39	CLOSE	EXCLUDED	NOTE 3					
20C-69-2	20C	22 RC PUMP BRG CLG WTR-RELIEF	NF-39246-1	39	CLOSE	EXCLUDED	NOTE 3					
20C-7-1	20C	22 RHR HX CC OUTLET	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
20C-7-2	20C	21 RHR HX CC OUTLET	NF-39246-1	39	THROT	EXCLUDED						Valve used for system or component maintenance
20C-70-1	20C	32A PENETRATION LEAK-TEST	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-70-2	20C	32B PENETRATION LEAK-TEST	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-70-3	20C	39 PENETRATION LEAK-TEST	NF-39246-1	39	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
20C-73-1	20C	21 RCP BRG WTR SUPPLY CHK	NF-39246-1	39	OPEN	C	ACT-OPEN		E	Q		
20C-73-2	20C	22 RCP BRG WTR SUPPLY CHK	NF-39246-1	39	OPEN	C	ACT-OPEN		E	Q		
CV31247	20C	21 REACTOR CLNT PMP BRG CLNT CUTLET	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system control
CV31248	20C	22 REACTOR CLNT PMP BRG CLNT CUTLET	NF-39246-1	39	OPEN	EXCLUDED						Valve used for system control
CV31253	20C	21 EXCS LTDWN HT EXCH OUTLET	NF-39246-1	39	CLOSE	B	ACT-CLOSE		E	Q		
MV32122	20C	COMP COOLING WTR SUPPLY HEADER	NF-39246-1	39	OPEN	B	ACT-CLOSE	SP-2163	E	R		See Deferral Note F
MV32123	20C	COMP COOLING WTR SUPPLY HEADER	NF-39246-1	39	OPEN	B	ACT-CLOSE	SP-2163	E	R		See Deferral Note F
MV32124	20C	21 REACTOR PUMP BRG CLG WTR SUPPLY	NF-39246-1	39	OPEN	B	PAS-OPEN		PV	2Y		
MV32125	20C	21 REACTOR PUMP BRG CLG WTR RETURN	NF-39246-1	39	OPEN	B	PAS-OPEN		PV	2Y		
MV32126	20C	22 REACTOR CLNT PUMP BRG CLG WTR SUPPLY	NF-39246-1	39	OPEN	B	PAS-OPEN		PV	2Y		
MV32127	20C	22 REACTOR CLNT PUMP BRG CLG WTR RETURN	NF-39246-1	39	OPEN	B	PAS-OPEN		PV	2Y		
MV32128	20C	21 RSDL HT EXGR COMP CLNT INLT MV	NF-39246-1	39	OPEN	B	ACT-BOTH	SP-2155	E	Q		
MV32129	20C	22 RSDL HT EXGR COMP CLNT INLT MV	NF-39246-1	39	OPEN	B	ACT-BOTH	SP-2155	E	Q		
MV32130	20C	21 EXCESS LETDOWN HT EXCH SUPPLY	NF-39246-1	39	OPEN	B	ACT-CLOSE		E	Q		
MV32211	20C	21 COMP CLG PMP SUCT MV	NF-39246-1	39	OPEN	B	ACT-BOTH	SP-2155	E	Q		
MV32212	20C	22 COMP CLG PMP SUCT MV	NF-39246-1	39	OPEN	B	ACT-BOTH	SP-2155	E	Q		
MV32268	20C	21/22 RCP COMP CLG INLT ISOL MV B	NF-39246-1	39	OPEN	B	ACT-BOTH	SP-2163	E	R		See Deferral Note F
MV32269	20C	21/22 RCP COMP CLG INLT ISOL MV A	NF-39246-1	39	OPEN	B	ACT-BOTH	SP-2163	E	R		See Deferral Note F
2CL-100-1	2CL	21 FCU CLG WTR SUPPLY ISOLATION	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-100-2	2CL	22 FCU CLG WTR SUPPLY ISOLATION	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-100-3	2CL	23 FCU CLG WTR SUPPLY ISOLATION	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-100-4	2CL	24 FCU CLG WTR SUPPLY ISOLATION	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-100-5	2CL	21 & 23 FCU CL RTN ORIF DWNSTRM ISOLATION	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-100-6	2CL	22 & 24 FCU CL RTN ORIF DWNSTRM ISOLATION	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-100-7	2CL	21 & 23 FCU CL RTN ORIF UPSTREAM ISOLATION	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-100-8	2CL	22 & 24 FCU CL RTN ORIF UPSTREAM ISOLATION	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-12-1	2CL	21 CONTAINMENT FAN COILS-SUPPLY	NF-39217-3	36	OPNCLS	C	ACT-OPEN		E	Q		
2CL-12-2	2CL	23 CONTAINMENT FAN COILS-SUPPLY	NF-39217-3	36	OPNCLS	C	ACT-OPEN		E	Q		
2CL-12-3	2CL	22 CONTAINMENT FAN COILS-SUPPLY	NF-39217-3	36	OPNCLS	C	ACT-OPEN		E	Q		
2CL-12-4	2CL	24 CONTAINMENT FAN COILS-SUPPLY	NF-39217-3	36	OPNCLS	C	ACT-OPEN		E	Q		
2CL-17-13	2CL	CL SUPPLY TO FIRE PROT SYST	NF-39217	36	OPEN	EXCLUDED	NOTE 5					Valve used for system or component maintenance
2CL-17-14	2CL	CL SUPPLY TO FIRE PROTECTION SYSTEM	NF-39217	36	OPEN	EXCLUDED	NOTE 5					Valve used for system or component maintenance
2CL-17-15	2CL	CL RET FROM CHRG PMPS MOTOR UNIT CLRS	NF-39603-2	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-17-16	2CL	CL RET FROM AUX BLDG FAN FLR UNIT COOLERS	NF-39603-2	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-19-3	2CL	TO RESID PIT SUMP TEST LINE	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-19-33	2CL	SAMPLE VALVE TO GEN SAMPLE PANEL	NF-39217	36	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-20-30	2CL	21 COMP CLG HT EXCH OUTLET-LOCAL SAMPLE	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-20-31	2CL	22 COMP CLG HT EXCH OUTLET-LOCAL SAMPLE	NF-39217	36	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-20-37	2CL	CLG WTR SUPPLY TO AUX FDWTR PUMPS- DRAIN	NF-39216	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-1	2CL	21 CONTAINMENT FAN COIL OUTLET LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-11	2CL	21 FAN COIL MTR COOLER SUPPLY LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-16	2CL	16 CONTAINMENT FAN COIL SUPPLY LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test



Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2CL-21-18	2CL	21 FAN COIL MTR COOLER DISCH LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-2	2CL	23 CONTAINMENT FAN COIL OUTLET LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-21	2CL	22 FAN COIL MTR COOLER SUPPLY LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-23	2CL	22 CONTAINMENT FAN COIL SUPPLY LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-28	2CL	22 FAN COIL MTR COOLER DISCH LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-3	2CL	24 CONTAINMENT FAN COIL OUTLET LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-30	2CL	23 FAN COIL MTR COOLER INLET LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-35	2CL	23 CONTAINMENT FAN COIL SUPPLY LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-39	2CL	24 CONTAINMENT FAN COIL SUPPLY LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-4	2CL	22 CONTAINMENT FAN COIL OUTLET LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-40	2CL	24 FAN COIL MTR COOLER SUPPLY LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-44	2CL	24 FAN COIL MTR COOLER DISCH LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-45	2CL	22 CNTMT FAN COIL SUPPLY LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-47	2CL	21 CNTMT FAN COIL SUPPLY LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-58	2CL	23 CNTMT FAN COIL SUPPLY LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-59	2CL	22 & 24 CNTMT FAN COIL RETURN LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-64	2CL	RET FROM D-2 DIESEL GEN CLG LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-65	2CL	CLG-WTR TO CNTNMNT INT CLN-UP FILT. VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-66	2CL	23 CNTMT FAN COIL RET-LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-67	2CL	23 CNTMT FAN COIL RETURN-LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-68	2CL	24 CNTMT FAN COIL SUPPLY-LINE VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-21-69	2CL	24 CNTMT FAN COIL RET-LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CL-22-1	2CL	21 & 23 CONTAINMENT FAN COIL BY-PASS	NF-39217	36	OPEN	EXCLUDED						Manual valve with no remote indication
2CL-22-2	2CL	22 & 24 CONTAINMENT FAN COIL BY-PASS	NF-39217	36	OPEN	EXCLUDED						Manual valve with no remote indication
2CL-22-3	2CL	ISOLA BETWEEN 21 & 23 FCU CROSS TIE	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-22-4	2CL	ISOLA BETWEEN 22 & 24 FCU CROSS TIE	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-25-1	2CL	22 DOWP HX RELIEF	NF-39217	36	OPEN	EXCLUDED	NOTE 3					
2CL-36-1	2CL	LOOP B CLG WTR SPLY HDR STOP	NF-39216	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-37-1	2CL	21 CLG WTR STRAINER INLET	NF-39216	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-37-2	2CL	22 CLG WTR STRAINER INLET	NF-39216	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-37-3	2CL	21 CLG WTR STRAINER OUTLET	NF-39216	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-37-4	2CL	22 CLG WTR STRAINER OUTLET	NF-39216	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-39-1	2CL	21 CLG WTR PUMP DISCH	NF-39216	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-39-2	2CL	22 CLG WTR PUMP DISCH	NF-39216	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-40-1	2CL	21 COMP CLG HT EXGR CLG WTR RETURN	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-40-2	2CL	22 COMP CLG HT EXGR CLG WTR RETURN	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-43-1	2CL	21 CLG WTR PUMP DISCH	NF-39216	36	OPEN	C	ACT-CLOSE	SP-1106B	E	Q		
2CL-43-2	2CL	22 CLG WTR PUMP DISCH	NF-39216	36	CLOSE	C	ACT-BOTH	SP-1107B	E	Q		
2CL-57-1	2CL	21 COMP CLG HT EXCH	NF-39217	36	OPNCLS	EXCLUDED	NOTE 3					
2CL-57-2	2CL	22 COMP CLG HT EXCH	NF-39217	36	OPNCLS	EXCLUDED	NOTE 3					
2CL-57-3	2CL	21 CNTMT FCU RTRN LINE RELIEF	NF-39217	36	OPNCLS	EXCLUDED	NOTE 3					
2CL-57-4	2CL	22 CNTMT FCU RTRN LINE RELIEF	NF-39217	36	OPNCLS	EXCLUDED	NOTE 3					
2CL-57-5	2CL	23 CNTMT FCU RTRN LINE RELIEF	NF-39217	36	OPNCLS	EXCLUDED	NOTE 3					
2CL-57-6	2CL	24 CNTMT FCU RTRN LINE RELIEF	NF-39217	36	OPNCLS	EXCLUDED	NOTE 3					
2CL-67-1	2CL	CL MU TO EXP TK CHK	NF-39217	36	OPNCLS	EXCLUDED	NOTE 5					Valve used for system or component maintenance
2CL-71-3	2CL	21 SGB HEAT EXCH RETURN LINE	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-80-10	2CL	21 & 23 CNTMT FAN COILS TO RAD MONITOR	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-80-11	2CL	22 & 24 CNTMT FAN COILS TO RAD MONITOR	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-80-5	2CL	22 CLG WTR PUMP GEAR COOLER INLET	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-80-6	2CL	22 CLG WTR PUMP GEAR COOLER OUTLET	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-90-2	2CL	CL TO 21/23 FCU CORROSION MON ISOL	NF-39217-2	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-90-3	2CL	CL TO 22/24 FCU CORROSION MON ISOL	NF-39217-2	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-99B-1	2CL	SUPPLY TO BATTERY ROOM UNIT COOLERS	NF-39217-3	36	OPEN	EXCLUDED	NOTE 5					Valve used for system or component maintenance



## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	PAID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2CL-99B-2	2CL	SUPPLY TO AIR COMPR MOTOR UNIT COOLER	NF-39217-3	36	OPEN	EXCLUDED	NOTE 5					Valve used for system or component maintenance
2CL-99B-3	2CL	SUPPLY TO CHARGING PUMP MOTOR UNIT 2CLR	NF-39217-3	36	OPEN	EXCLUDED	NOTE 5					Valve used for system or component maintenance
2CL-99B-4	2CL	SUPPLY TO CONT SPRAY PMP UNIT COOLER	NF-39217-3	36	OPEN	EXCLUDED						Valve used for system or component maintenance
2CL-99B-6	2CL	SUPPLY TO CNTMT INTERNAL CLN UP FILTER	NF-39217-3	36	OPEN	EXCLUDED	NOTE 5					Valve used for system or component maintenance
CW-15-2	2CL	SUPPLY TO 22 CL PUMP DIESEL ENG COOLING	NF-39216	36	OPEN	EXCLUDED						Valve used for system or component maintenance
CW-19-13	2CL	12/22 AUX FW PUMP CL SUPPLY LINE DRAIN	NF-39223	36	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
CW-19-14	2CL	21 COOLING WATER STRAINER DRAIN	NF-39216	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CW-19-15	2CL	22 COOLING WTR STRAINER DRAIN	NF-39216	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CW-19-16	2CL	21 AUX FW PUMP CLG WTR SUPPLY LINE FLUSH	NF-39216-2	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CW-19-19	2CL	22 AUX FW PUMP CLG WTR SUPPLY LINE FLUSH	NF-39217-1	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CW-19-2	CL	12 COOLING WATER STRAINER - DRAIN	NF-39216	36	OPEN	EXCLUDED	NOTE 5					Valve used for system or component maintenance
CW-20-2	2CL	21 COMP CLG HT EXCH VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CW-20-5	2CL	21 CC HX CLG WTR INLET LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CW-20-6	2CL	22 COMP CLG HT EXCH VENT	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CW-20-8	2CL	22 CC HX CLG WTR INLET LINE DRAIN	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CW-22-1	2CL	21 & 23 CONTAINMENT FAN COIL BY-PASS	NF-39217	36	OPEN	EXCLUDED						Manual valve with no remote indication
2CW-22-2	2CL	22 & 24 CONTAINMENT FAN COIL BY-PASS	NF-39217	36	OPEN	EXCLUDED						Manual valve with no remote indication
CW-60-3	2CL	RETURN FROM 21 & 23 CONTAINMENT FAN COILS	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
CW-60-4	2CL	RETURN FROM 22 & 24 CONTAINMENT FAN COILS	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
CW-64-7	2CL	21 CLG WTR STRAINER (VENT)	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CW-64-8	2CL	22 CLG WTR STRAINER (VENT)	NF-39217	36	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CW-7-1	2CL	22/24 CNTMT FAN COILS CLG WTR SUPPLY	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
CW-7-2	2CL	21/23 CNTMT FAN COILS CLG WTR SUPPLY	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
CW-70-1	2CL	21 SGB HT EXGR CLG WTR SUPPLY	NF-39217	36	OPEN	EXCLUDED	NOTE 5					Valve used for system or component maintenance
CW-75-2	2CL	22 CL PUMP JACKET WATER HT EXCH INLET	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
CW-76-2	2CL	22 CL PUMP JACKET WATER HT EXCH OUTLET	NF-39217	36	OPEN	EXCLUDED						Valve used for system or component maintenance
CV31383	2CL	21 COMP CLG HT EXCH CLG WTR RETURN	NF-39217	36	OPEN	B	ACT-OPEN			E	CS	See Deferral Note L
CV31384	2CL	22 COMP CLG HT EXCH CLG WTR RETURN	NF-39217	36	OPEN	B	ACT-OPEN			E	CS	See Deferral Note L
CV31457	2CL	22 DD CLWP DSL JCKT CLG OUTLT	NF-39217	36	CLOSE	B	ACT-OPEN	SP-1106B		E	Q	
CV31654	2CL	21 CLG WTR STRNR BK-WASH	NF-39217	36	N/A	EXCLUDED	NOTE 5					
CV31655	2CL	22 CLG WTR STRNR BK-WASH	NF-39217	36	N/A	EXCLUDED	NOTE 6					
CV39200	2CL	21/23 FCU CLG WATER RTN ORIFICE B-P VLV	NF-39217	36	CLOSE	B	ACT-OPEN	SP-2158		E	Q	
CV39202	2CL	22/24 FCU CLG WATER RTN ORIFICE B-P VLV	NF-39217	36	CLOSE	B	ACT-OPEN	SP-2158		E	Q	
MV32026	2CL	21 MD AFW PUMP SUCT CLG WTR SUPPLY MV	NF-39216	36	CLOSE	B	ACT-OPEN	SP-2193		E	CS	See Deferral Note J
MV32030	2CL	22 TD AFW PUMP SUCT CLG WTR SUPPLY MV	NF-39216	36	CLOSE	B	ACT-OPEN	SP-2193		E	CS	See Deferral Note J
MV32033	2CL	2 TURB BLDG CLG WTR HDR MV	NF-39217-1	36	OPEN	B	ACT-CLOSE	SP-1110		E	Q	
MV32034	2CL	COOLING WTR PUMPS-CROSS-OVER	NF-39216	36	OPEN	B	ACT-CLOSE	SP-2158		E	Q	
MV32035	2CL	COOLING WTR PUMPS-CROSS-OVER	NF-39216	36	OPEN	B	ACT-CLOSE	SP-2158		E	Q	
MV32147	2CL	21 CONTAINMENT FAN COIL OUTLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158		E	Q	
MV32148	2CL	21 CONTAINMENT FAN COIL OUTLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158		E	Q	
MV32150	2CL	22 CONTAINMENT FAN COIL OUTLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158		E	Q	
MV32151	2CL	22 CONTAINMENT FAN COIL OUTLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158		E	Q	
MV32153	2CL	23 CONTAINMENT FAN COIL OUTLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158		E	Q	
MV32154	2CL	23 CONTAINMENT FAN COIL OUTLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158		E	Q	
MV32156	2CL	24 CONTAINMENT FAN COIL OUTLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158		E	Q	
MV32157	2CL	24 CONTAINMENT FAN COIL OUTLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158		E	Q	
MV32159	2CL	LOOP A/B CLG WTR HDR XOVV MV B	NF-39217	36	OPEN	B	ACT-CLOSE	SP-2158		E	Q	
MV32160	2CL	21 COMP CLG HT EXGR CLG WTR MV	NF-39217	36	BY SS	B	ACT-OPEN	SP-2155		E	Q	
MV32161	2CL	22 COMP CLG HT EXGR CLG WTR MV	NF-39217	36	BY SS	B	ACT-OPEN	SP-2155		E	C	
MV32329	2CL	24 " CLG WTR RETURN UNIT 2	NF-39217	36	OPEN	B	ACT-OPEN	SP-1158		E	Q	
MV32334	2CL	24 " CLG WTR RETURN UNIT 2	NF-39217	36	OPEN	B	PAS-OPEN			PV	2Y	
MV32372	2CL	21/22 TURB OIL CLRS CLG WTR BYPS SPLY MV	NF-39216	36	OPEN	EXCLUDED	NOTE 5					Valve used for system or component maintenance
MV32386	2CL	21 CONTAINMENT FAN COIL INLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158		E	Q	

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
MV32387	2CL	22 CONTAINMENT FAN COIL INLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158	E	Q		
MV32388	2CL	23 CONTAINMENT FAN COIL INLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158	E	Q		
MV32389	2CL	24 CONTAINMENT FAN COIL INLET	NF-39217	36	OPEN	B	ACT-BOTH	SP-2158	E	Q		
2CS-22-1	2CS	21 CONT SPRAY PUMP SUCT RELIEF	NF-39237	19	OPER	C	ACT-BOTH	P3120-14-21A	SP	10Y		
2CS-22-2	2CS	22 CONT SPRAY PUMP SUCT RELIEF	NF-39237	19	OPER	C	ACT-BOTH	P3120-14-22A	SP	10Y		
2CS-23-1	2CS	21 CNTMT SPRAY PUMP MECHANICAL SEAL VENT	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-23-2	2CS	22 CNTMT SPRAY PUMP MECHANICAL SEAL VENT	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-24-1	2CS	21 CS PUMP RECIRC TO RWST	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-24-2	2CS	22 CS PUMP RECIRC TO RWST	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-25-1	2CS	21 CS PUMP DISCH TEST	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-25-2	2CS	22 CS PUMP DISCH TEST	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-30-10	2CS	21 CONT SPRAY PUMP DISCH	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-30-5	2CS	21 & 22 CONT SPRAY PUMP SUCT VENT	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-30-6	2CS	22 CONT SPRAY PUMP DRAIN	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-30-7	2CS	21 CONT SPRAY PUMP DRAIN	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-30-8	2CS	21 RWST TO CHARGING PUMPS DRAIN	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-30-9	2CS	22 CONT SPRAY PUMP DISCH	NF-39237	19	CLOSE	EXCLUDED						Valve used for system or component maintenance
2CS-31-1	2CS	MV-32108 STEM LEAK-OFF	NF-39237	19	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-31-2	2CS	MV-32109 STEM LEAK-OFF	NF-39237	19	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2CS-32-1	2CS	21 CS PUMP SUCT SPRAY ADD RET	NF-39237	19	OPEN	EXCLUDED						Valve used for system or component maintenance
2CS-32-2	2CS	21 CS PUMP SUCT SPRAY ADD RET	NF-39237	19	OPEN	EXCLUDED						Valve used for system or component maintenance
2CS-32-3	2CS	22 CS PUMP SUCT SPRAY ADD RET	NF-39237	19	OPEN	EXCLUDED						Valve used for system or component maintenance
2CS-32-4	2CS	22 CS PUMP SUCT SPRAY ADD RET	NF-39237	19	OPEN	EXCLUDED						Valve used for system or component maintenance
CS-39	2CS	22 CONT SPRAY PUMP DISCH	NF-39237	19	OPEN	EXCLUDED						Valve used for system or component maintenance
CS-40	2CS	21 CONT SPRAY PUMP DISCH	NF-39237	19	OPEN	EXCLUDED						Valve used for system or component maintenance
CS-41	2CS	22 CNTMT SPRAY PMP TEST LINE ISOLATION	NF-39237	19	CLOSE	EXCLUDED	NOTE 8					Valve used for vent, drain, instrument or test
CS-42	2CS	21 CNTMT SPRAY PMP TEST LINE ISOLATION	NF-39237	19	CLOSE	EXCLUDED	NOTE 8					Valve used for vent, drain, instrument or test
CS-43	2CS	AIR TEST CONN	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CS-44	2CS	AIR TEST CONN	NF-39237	19	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CS-45	2CS	21 REF WTR STOR TK	NF-39237	19	OPEN	EXCLUDED						Valve used for system or component maintenance
CS-46	2CS	22 CONT SPRAY PUMP SUCT CHK	NF-39237	19	OPNCLS	C	ACT-BOTH		E	R		See Deferral Note L
CS-47	2CS	21 CONT SPRAY PUMP SUCT CHK	NF-39237	19	OPNCLS	C	ACT-BOTH		E	R		See Deferral Note L
CS-48	2CS	22 CONT SPRAY PUMP DISCH CHK VLV	NF-39237	19	OPNCLS	A, C	ACT-BOTH		E	R		See Deferral Note L
CS-49	2CS	21 CONT SPRAY PUMP DISCH CHK VLV	NF-39237	19	OPNCLS	A, C	ACT-BOTH	SP-2072 29B	LT	R		See Deferral Note L
2SF-18-1	2CS	21 REFUELING WTR STOR TANK	NF-39237	19	CLOSE	EXCLUDED		SP-2072 29A	LT	R		Valve used for system or component maintenance
MV32108	2CS	21 CONT SPRAY PUMP SUCT	NF-39237	19	CLOSE	B	ACT-OPEN	SP-2137	E	R		See Deferral Note B
MV32109	2CS	22 CONT SPRAY PUMP SUCT	NF-39237	19	CLOSE	B	ACT-OPEN	SP-2137	E	R		See Deferral Note B
MV32110	2CS	21 CONT SPRAY PUMP SUCT	NF-39237	19	OPEN	B	ACT-BOTH	SP-2137	E	R		See Deferral Note B
MV32111	2CS	22 CONT SPRAY PUMP SUCT	NF-39237	19	OPEN	B	ACT-BOTH	SP-2137	E	R		See Deferral Note B
MV32114	2CS	21 CONT SPRAY PUMP DISCH	NF-39237	19	CLOSE	A	ACT-OPEN	SP-2241/2137	E	CS		See Deferral Note G
MV32116	2CS	22 CONT SPRAY PUMP DISCH	NF-39237	19	CLOSE	A	ACT-OPEN	SP-2072 29B	LT	R		See Deferral Note G
2FW-20-1	2FW	16 "FDWTR LINE DRAIN DWNSTRM OF MV32029	NF-39223	38	CLOSE	EXCLUDED		SP-2241/2137	E	CS		See Deferral Note G
2FW-20-2	2FW	16 "FDWTR LINE DRAIN DWNSTRM OF MV32028	NF-39223	38	CLOSE	EXCLUDED		SP-2072 29A	LT	R		Valve used for vent, drain, instrument or test
2FW-20-3	2FW	21 S/G FW LINE VENT	NF-39223	38	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2FW-20-4	2FW	22 S/G FW LINE VENT	NF-39223	38	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2FW-8-1	2FW	FEEDWATER PUMP DISCH AT STM GEN 21 CHK	NF-39223	38	OPEN	C	ACT-CLOSE		E	CS		See Deferral Note A
2FW-8-2	2FW	FEEDWATER PUMP DISCH AT STM GEN 22 CHK	NF-39223	38	OPEN	C	ACT-CLOSE		E	CS		See Deferral Note A
MV32028	2FW	FW TO 21 STEAM GENERATOR	NF-39223	38	OPEN	B	ACT-CLOSE		E	CS		See Deferral Note J
MV32029	2FW	FW TO 22 STEAM GENERATOR	NF-39223	38	OPEN	B	ACT-CLOSE		E	CS		See Deferral Note J

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code	Normal	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2HC-1-1	2HC	FROM 21 DOME RECIRC FAN TO ANNULUS & GA	NF-39251	25	OPEN	EXCLUDED						Valve used for system or component maintenance
2HC-1-2	2HC	FROM 24 DOME RECIRC FAN TO ANNULUS & GA	NF-39251	25	OPEN	EXCLUDED						Valve used for system or component maintenance
2HC-1-3	2HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	CLOSE	B	ACT-OPEN	SP-2157	E	CS		See Deferral Note B
2HC-1-4	2HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	CLOSE	B	ACT-OPEN	SP-2157	E	CS		See Deferral Note B
2HC-1-5	2HC	EMERGENCY AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	CLOSE	B	ACT-OPEN	SP-2157	E	CS		See Deferral Note B
2HC-1-6	2HC	INST AIR SUPPLY TO CNTMT VESSEL	NF-39251	25	CLOSE	B	ACT-OPEN	SP-2157	E	CS		See Deferral Note B
2HC-2-1	2HC	INST & EMERG AIR TO INSIDE CNTMT VESSEL CK	NF-39251	25	OPNCLS	A, C	ACT-BOTH		E	CS		See Deferral Note L
								SP-2072.50	LT	R		
2HC-2-2	2HC	INST & EMERG AIR TO INSIDE CNTMT VESSEL CK	NF-39251	25	OPNCLS	A, C	ACT-BOTH		E	CS		See Deferral Note L
								SP-2072.42A	LT	R		
2HC-5-5	2HC	UNIT 2 INST AIR TO CNTNMNT VESSEL - TEST	NF-39251	25	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2HC-5-6	2HC	UNIT 2 INST AIR TO CNTNMNT VESSEL - TEST	NF-39251	25	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CV31924	2HC	POST LOCA TO FI ISOL	NF-39251	25	CLOSE	A	ACT-BOTH					
								SP-2072.50	LT	R		
CV31926	2HC	POST LOCA TO GA ISOL	NF-39251	25	CLOSE	A	ACT-BOTH					
								SP-1252	E	Q		
								SP-2072.50	LT	R		
CV31928	2HC	POST LOCA TO GA ISOL	NF-39251	25	CLOSE	A	ACT-BOTH					
								SP-1252	E	Q		
								SP-2072.42A	LT	R		
CV31930	2HC	POST LOCA TO FI ISOL	NF-39251	25	CLOSE	A	ACT-BOTH					
								SP-1252	E	Q		
								SP-2072.42A	LT	R		
MV32290	2HC	POST LOCA VENT ISOL	NF-39251	25	CLOSE	A	ACT-BOTH					
								SP-1252	E	Q		
								SP-2072.50	LT	R		
MV32292	2HC	POST LOCA VENT ISOL	NF-39251	25	CLOSE	A	ACT-BOTH					
								SP-1252	E	Q		
								SP-2072.42A	LT	R		
MV32293	2HC	POST LOCA SUPPLY ISOL	NF-39251	25	CLOSE	A	ACT-BOTH					
								SP-1252	E	Q		
								SP-2072.50	LT	R		
MV32295	2HC	POST LOCA SUPPLY ISOL	NF-39251	25	CLOSE	A	ACT-BOTH					
								SP-1252	E	Q		
								SP-2072.42A	LT	R		
SV33992	2HC	11 POST LOCA H2CNTMT VENT	NF-39251	25	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
SV33993	2HC	12 POST LOCA H2CNTMT VENT	NF-39251	25	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2MS-15-1	2MS	FROM 22 STM GEN 22 AUX FDWTR PUMP CHK	NF-39219	37	OPER		ACT-BOTH		E	CS		See Deferral Note K
2MS-15-2	2MS	FROM 21 STM GEN 22 AUX FDWTR PUMP CHK	NF-39219	37	OPER	C	ACT-BOTH		E	CS		See Deferral Note K
2MS-18-2	2MS	21 SAFETY VALVE MANIFOLD VENT	NF-39219	37	CLOSE	EXCLUDED						Valve use usepuynt, drain, instrument or test
2MS-18-4	2MS	22 SAFETY VALVE MANIFOLD VENT	NF-39219	37	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2MS-18-6	2MS	21 STEAM GEN OUTLET LINE VENT	NF-39219	37	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2MS-18-8	2MS	22 STEAM GEN OUTLET LINE VENT	NF-39219	37	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2MS-20-4	2MS	22 AUX FDWTR PUMP EXH HD DRAIN	NF-39219	37	THROT	EXCLUDED						Valve used for vent, drain, instrument or test
2MS-20-7	2MS	ROOT VALVE FOR PT-17006	NF-39219	37	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2MS-22-3	2MS	MS SUPPLY TO 22 AFWP TURB HIGH POINT VENT	NF-39219	37	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2MS-24-1	2MS	MS SUPPLY TO 22 AFW TURB HIGH POINT VENT	NF-39219	37	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2MS-4-1	2MS	STM GEN 21 RELIEF UPSTREAM OF CV 31102	NF-39219	37	OPEN	EXCLUDED						Valve used for system or component maintenance
2MS-4-2	2MS	STM GEN 22 RELIEF UPSTREAM OF CV 31107	NF-39219	37	OPEN	EXCLUDED						Valve used for system or component maintenance
RS-19-3	2MS	STM GEN 21 OUTLET STOP - CHECK	NF-39219	37	OPEN	C	ACT-CLOSE		E	CS		See Deferral Note A
RS-19-4	2MS	STM GEN 22 OUTLET STOP - CHECK	NF-39219	37	OPEN	C	ACT-CLOSE		E	CS		See Deferral Note A
RS-21-11	2MS	21 STM RELIEF HDR	NF-39219	37	CLOSE	C	ACT-BOTH	P3120-52-2	SP	10Y		
RS-21-12	2MS	21 STM RELIEF HDR	NF-39219	37	CLOSE	C	ACT-BOTH	P3120-52-2	SP	10Y		
RS-21-13	2MS	21 STM RELIEF HDR	NF-39219	37	CLOSE	C	ACT-BOTH	P3120-52-2	SP	10Y		
RS-21-14	2MS	21 STM RELIEF HDR	NF-39219	37	CLOSE	C	ACT-BOTH	P3120-52-2	SP	10Y		
RS-21-15	2MS	21 STM RELIEF HDR	NF-39219	37	CLOSE	C	ACT-BOTH	P3120-52-2	SP	10Y		
RS-21-16	2MS	22 STM RELIEF HDR	NF-39219	37	CLOSE	C	ACT-BOTH	P3120-52-2	SP	10Y		
RS-21-17	2MS	22 STM RELIEF HDR	NF-39219	37	CLOSE	C	ACT-BOTH	P3120-52-2	SP	10Y		
RS-21-18	2MS	22 STM RELIEF HDR	NF-39219	37	CLOSE	C	ACT-BOTH	P3120-52-2	SP	10Y		
RS-21-19	2MS	22 STM RELIEF HDR	NF-39219	37	CLOSE	C	ACT-BOTH	P3120-52-2	SP	10Y		





Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2RC-8-15	2RC	LOOP SEAL AT PRESSURIZER DRAIN	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-19	2RC	AUX SPRAY TO PRZR INLET LINE DRAIN	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-21	2RC	DRAIN-DOWNSTREAM OF RTD MANIFOLD LOOP A	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-22	2RC	VENT-UPSTREAM OF RTD MANIFOLD LOOP A	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-23	2RC	DRAIN-DOWNSTREAM OF RTD MANIFOLD LOOP A	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-24	2RC	VENT-UPSTREAM OF RTD MANIFOLD LOOP B	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-25	2RC	VENT-UPSTREAM OF RTD MANIFOLD LOOP B	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-26	2RC	DRAIN-DOWNSTREAM OF RTD MANIFOLD LOOP B	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-27	2RC	DRAIN-DOWNSTREAM OF RTD MANIFOLD LOOP B	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-28	2RC	VENT-UPSTREAM OF RTD MANIFOLD LOOP B	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-29	2RC	RESID HT EXH TO REACTOR-DRAIN	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-31	2RC	REACTOR HEAD VENT FLUSHING VALVE	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-32	2RC	PRESSURIZER VENT FLUSHING VALVE	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-33	2RC	RX HEAD VENT ORIFICE BYPASS	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-5	2RC	REACTOR VESSEL VENT	HIAW 1001-3	30	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-8-9	2RC	CHARGING LINE TO LOOP B-DRAIN	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RC-9-3	2RC	PENETRATION NO 45 LEAK-TEST	HIAW 1001-3	30	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CV31209	2RC	PRT N2 SUPPLY ISOL	HIAW 1001-3	30	BY SS	A	ACT-CLOSE	SP-2272	E	Q		
								SP-2072.2	LT	R		
CV31228	2RC	LOOP B TO PRESSURIZER	HIAW 1001-3	30	THROT	EXCLUDED						Valve used for system control
CV31229	2RC	LOOP B TO PRESSURIZER	HIAW 1001-3	30	THROT	EXCLUDED						Valve used for system control
CV31233	2RC	PRESSURIZER OUTLET TO PRZR RLF TNK A	HIAW 1001-3	30	CLOSE	B	ACT-BOTH	SP-2291	E	CS		See Deferral Note B
CV31234	2RC	PRESSURIZER OUTLET TO PRZR RLF TNK B	HIAW 1001-3	30	CLOSE	B	ACT-BOTH	SP-2291	E	CS		See Deferral Note B
CV31342	2RC	RTR MAJ WATER TO PRT ISOL	HIAW 1001-3	30	BY SS	A	ACT-CLOSE	SP-2272	E	Q		
								SP-2072.45	LT	R		
CV31344	2RC	PRT SAMPLE TO GA	HIAW 1001-3	30	BY SS	A	ACT-CLOSE	SP-2246	E	Q		
								SP-2072.1	LT	R		
CV31345	2RC	PRT SAMPLE TO GA	HIAW 1001-3	30	BY SS	A	ACT-CLOSE	SP-2246	E	Q		
								SP-2072.1	LT	R		
MV32197	2RC	PRESSURIZER OUTLET TO PRZR RLF TNK A	HIAW 1001-3	30	OPEN	B	ACT-BOTH	SP-2265	E	Q		
MV32198	2RC	PRESSURIZER OUTLET TO PRZR RLF TNK B	HIAW 1001-3	30	OPEN	B	ACT-BOTH	SP-2265	E	Q		
SV37091	2RC	PRESSURIZER VENT VALVE A	HIAW 1001-3	30	CLOSE	B	ACT-BOTH	SP-2248	E	R		See Deferral Note B
SV37092	2RC	PRESSURIZER VENT VALVE B	HIAW 1001-3	30	CLOSE	B	ACT-BOTH	SP-2248	E	R		See Deferral Note B
SV37093	2RC	RTR HEAD VENT VALVE A	HIAW 1001-3	30	CLOSE	B	ACT-BOTH	SP-2248	E	R		See Deferral Note B
SV37094	2RC	RTR HEAD VENT VALVE B	HIAW 1001-3	30	CLOSE	B	ACT-BOTH	SP-2248	E	R		See Deferral Note B
SV37095	2RC	VENT TO PRT VALVE A	HIAW 1001-3	30	CLOSE	B	ACT-BOTH	SP-2248	E	R		See Deferral Note B
SV37096	2RC	VENT TO CNTMT ATMOSPHERE	HIAW 1001-3	30	CLOSE	B	ACT-BOTH	SP-2248	E	R		See Deferral Note B
CV31129	2RD	RAD MON 2R-11 & 2R-12 SMPL RTN	NF-39790-4	N/A	OPEN	A	ACT-CLOSE	SP-2244	E	Q		
								SP-2072.22	LT	R		
CV31642	2RD	RAD MON 2R-11 & 2R-12 SMPL RTN	NF-39790-4	N/A	OPEN	A	ACT-CLOSE	SP-2244	E	Q		
								SP-2072.22	LT	R		
CV31643	2RD	RAD MON 2R-11 & 2R-12 SMPL INLET	NF-39790-4	N/A	OPEN	A	ACT-CLOSE	SP-2244	E	Q		
								SP-2072.23	LT	R		
CV31644	2RD	RAD MON 2R-11 & 2R-12 SMPL INLET	NF-39790-4	N/A	OPEN	A	ACT-CLOSE	SP-2244	E	Q		
								SP-2072.23	LT	R		
2RH-1-1	2RH	RHR PUMP #22 SUCT LINE	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance
2RH-1-2	2RH	RHR PUMP 22 SUCT LINE	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance
2RH-1-3	2RH	RHR EXCH-22 TUBE INLET	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for system or component maintenance
2RH-1-4	2RH	RHR EXCH 21 TUBE INLET	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance
2RH-10-1	2RH	DOWNSTREAM OF RH-EXCH-#22	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance
2RH-10-2	2RH	DOWNSTREAM OF RH-EXCH-21	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance
2RH-2-1	2RH	RHR PUMP 22 DISCH LINE	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance
2RH-2-2	2RH	RHR PUMP 21 DISCH LINE	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2RH-2-3	2RH	RH-EXCH-21 & 22 CROSSOVER (INLET)	HIAW 1001-8	35	CLOSE	EXCLUDED	NOTE 1					Valve used for system or component maintenance
2RH-2-4	2RH	RH-EXCH-21 & 22 CROSSOVER (INLET)	HIAW 1001-8	35	CLOSE	EXCLUDED	NOTE 1					Valve used for system or component maintenance
2RH-2-5	2RH	RH-EXCH-21 & 22 CROSSOVER (OUTLET)	HIAW 1001-8	35	CLOSE	EXCLUDED	NOTE 1					Valve used for system or component maintenance
2RH-2-6	2RH	RH-EXCH-21 & 22 CROSSOVER (OUTLET)	HIAW 1001-8	35	CLOSE	EXCLUDED	NOTE 1					Valve used for system or component maintenance
2RH-3-1	2RH	RHR PUMP 22 SUCTION LINE CHK	HIAW 1001-8	35	CLOSE	C	ACT-CLOSE		E	R		See Deferral Note K
2RH-3-2	2RH	RHR PUMP 21 SUCTION LINE CHK	HIAW 1001-8	35	CLOSE	C	ACT-CLOSE		E	R		See Deferral Note K
2RH-3-3	2RH	RHR PUMP 22 DISCHARGE LINE CHK	HIAW 1001-8	35	CLOSE	C	ACT-OPEN		E	CS		See Deferral Note L
2RH-3-4	2RH	RHR PUMP 21 DISCH LINE CHK	HIAW 1001-8	35	CLOSE	C	ACT-OPEN		E	CS		See Deferral Note L
2RH-4-1	2RH	2"RHR PUMP 22 DISCH-DRAIN	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-4-2	2RH	2"RHR PUMP 21 DISCH-DRAIN	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-5-1	2RH	2 INCH-RH-EXCH-22 RECIRC LINE	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance
2RH-5-2	2RH	2 INCH-RH-EXCH-21 RECIRC LINE	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance
2RH-6-1	2RH	2 INCH-LETDOWN LINE BY-PASS	HIAW 1001-8	35	OPN/CLS	C	ACT-OPEN		E	CS		See Deferral Note E
2RH-7-1	2RH	2 INCH-LETDOWN LINE MV 32235 BY-PASS	HIAW 1001-8	35	OPEN	EXCLUDED						Valve used for system or component maintenance
2RH-7-10	2RH	LOCAL SAMPLE DOWNSTREAM OF CV-31238	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-11	2RH	RH-EXCH-22 DRAIN-SHELL	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-12	2RH	RH-EXCH-#21 DRAIN-SHELL	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-13	2RH	RH-EXCH-#22 DRAIN-SHELL	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-14	2RH	RH-EXCH-#21 DRAIN-SHELL	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-15	2RH	LOOP A HOT LEG-DRAIN	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-16	2RH	LOOP B HOT LEG-DRAIN	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-17	2RH	LOOP B HOT LEG-VENT	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-2	2RH	FR RH-EXCH-TO SI PUMP 22 SUCTION-VENT	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-22	2RH	SUMP B TO RH-VENT	HIAW 1001-6	33	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-23	2RH	SUMP B TO RH-VENT	HIAW 1001-6	33	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-3	2RH	RHR PUMP 22 SUCTION LINE-STRAINER DRAIN	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-4	2RH	RHR PUMP 21 SUCTION LINE-STRAINER DRAIN	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-5	2RH	RH-EXCH-21 & 22 CROSSOVER-VENT (INLET)	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-6	2RH	RH-EXCH-21 & 22 CROSSOVER-VENT (OUTLET)	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-7	2RH	RHR PUMP 22 CASING DRAIN	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-8	2RH	RHR PUMP 21 CASING DRAIN	HIAW 1001-8	35	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-7-9	2RH	FR RH-EXCH-TO SI PUMP 21 SUCTION-VENT	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2RH-8-1	2RH	RHR PUMP #21 & #22 SUCTION	HIAW 1001-8	35	CLOSE	C	ACT-BOTH	P3120-59-2A	SP	10Y		
CV31238	2RH	RH EXCH #21 OUTLET	HIAW 1001-8	35	OPEN	B	PAS-OPEN		PV	2Y		
CV31239	2RH	RH EXCH #22 OUTLET	HIAW 1001-8	35	OPEN	B	PAS-OPEN		PV	2Y		
MV32169	2RH	DOWNSTREAM OF CV31238	HIAW 1001-8	35	CLOSE	A	PAS-CLOSE	SP-2273	PV	2Y		
								SP-2070	LT	R		
MV32192	2RH	2 REAC LOOP A RSDI HT RMVL ISOL MV A	HIAW 1001-8	35	CLOSE	A	PAS-CLOSE	SP-2273	PV	2Y		
								SP-2070	LT	R		
MV32193	2RH	2 REAC LOOP A RSDI HT RMVL ISOL MV B	HIAW 1001-8	35	CLOSE	A	PAS-CLOSE	SP-2273	PV	2Y		
								SP-2070	LT	R		
MV32232	2RH	2 REAC LOOP B RSDI HT RMVL ISOL MV A	HIAW 1001-8	35	CLOSE	A	PAS-CLOSE	SP-2273	PV	2Y		
								SP-2070	LT	R		
MV32233	2RH	2 REAC LOOP B RSDI HT RMVL ISOL MV B	HIAW 1001-8	35	CLOSE	A	PAS-CLOSE	SP-2273	PV	2Y		
								SP-2070	LT	R		
CV31742	2SA	2 CNTMT INST AIR ISOL VLV A	NF-39244	N/A	OPEN	A	ACT-CLOSE	SP-2072 20	E	R		See Deferral Note H
								SP-2072 20	LT	R		
CV31743	2SA	2 CNTMT INST AIR ISOL VLV B	NF-39244	N/A	OPEN	A	ACT-CLOSE	SP-2072 20	E	R		See Deferral Note H
								SP-2072 20	LT	R		
2SB-1-1	2SB	22 STM GENERATOR INSIDE CONTAINMENT	NF-39250	40	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-1-2	2SB	22 STM GENERATOR INSIDE CONTAINMENT	NF-39250	40	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-1-3	2SB	21 STM GENERATOR INSIDE CONTAINMENT	NF-39250	40	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-1-4	2SB	21 STM GENERATOR INSIDE CONTAINMENT	NF-39250	40	OPEN	EXCLUDED						Valve used for system or component maintenance

Valve Number	Sys Description	P&ID	Code	Normal	Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2SB-2.1	2SB 22 STM GENERATOR INSIDE CONTAINMENT	NF-39250	40	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-2.2	2SB 21 STM GENERATOR INSIDE CONTAINMENT	NF-39250	40	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-3.4	2SB 21 SGB DRAIN INSIDE CONTAINMENT	NF-39250	40	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-3.9	2SB 22 SGB DRAIN INSIDE CONTAINMENT	NF-39250	40	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-34.1	2SB 21 STEAM GENERATOR DRAIN	NF-39250	40	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-34.2	2SB 21 SAG TO 21 SGB FLASH TK DRN - INSIDE CONTNMENT	NF-39250	40	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-4.1	2SB 21 STEAM GENERATOR DRAIN	NF-39250	40	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-70.46	2SB 21 SGB ISOL MV	NF-39250	40	OPEN	B	ACT-CLOSE	SP-2267	E	Q		
2SB-70.49	2SB 22 SGB ISOL MV	NF-39250	40	OPEN	B	ACT-CLOSE	SP-2267	E	Q		
2SB-70.51	2SB 21 SGB ISOL MV	NF-39250	40	OPEN	B	ACT-CLOSE	SP-2267	E	Q		
2SB-70.52	2SB 22 SGB ISOL MV	NF-39250	40	OPEN	B	ACT-CLOSE	SP-2267	E	Q		
2SB-10.1	2SB 21 REFG WTR STOR TANK OUTLET	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-10.2	2SB 21 SAFETY INJECTION PUMP #21 DISCH CHK	HIAW 1001-7	34	CLOSE	C	ACT-OPEN	SP-2092A	E	R		See Deferral Note D
2SB-13.1	2SB 21 SAFETY INJECTION PUMP #22 DISCH CHK	HIAW 1001-7	34	CLOSE	C	ACT-CLOSE	SP-2070	E	R		See Deferral Note D
2SB-13.2	2SB 21 SAFETY INJECTION PUMP #21 DISCH	HIAW 1001-7	34	OPEN	EXCLUDED						See Deferral Note D
2SB-14.1	2SB 21 SI PUMP DISCH CROSSOVER LINE	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-14.2	2SB 21 SI PUMP DISCH CROSSOVER LINE	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-15.1	2SB 21 ACC - 12 IN OUTLET TO R C DR TANK	HIAW 1001-6	33	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-15.10	2SB 21 SI RECIRC PUMP DISCH TO SI PUMP SUCTION	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for system or component maintenance
2SB-15.11	2SB 21 SI RECIRC PUMP SUCTION ISOLATION	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-15.12	2SB 21 SI RECIRC PUMP DISCH ISOLATION	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-15.13	2SB 21 SI RECIRC PUMP SUCTION	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-15.14	2SB 21 SI RECIRC PUMP DISCH TO 121 BAT FILL LINE B/P	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for system or component maintenance
2SB-15.15	2SB 21 SI RECIRC PUMP DISCH TO BAT 21 FILL LINE	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for system or component maintenance
2SB-15.16	2SB 21 SI PUMPS SUCTION LINE DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for system or component maintenance
2SB-15.2	2SB 22 ACC - 12 IN OUTLET TO R C DR TANK	HIAW 1001-6	33	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-15.3	2SB 21 SI PUMP DISCH TO TEST LINE	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-15.4	2SB 22 SI PUMP DISCH TO TEST LINE	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-15.5	2SB 21 REF WTR STG TANK OUTLET TO SI PUMP SUCT	HIAW 1001-6	33	OPEN	EXCLUDED						Valve used for system or component maintenance
2SB-15.6	2SB 21 COLD LEG INJ LINE TO LOOP A COLD LEG	HIAW 1001-6	33	THROT	EXCLUDED						Valve used for system or component maintenance
2SB-15.7	2SB 21 COLD LEG INJ LINE TO LOOP B COLD LEG	HIAW 1001-6	33	THROT	EXCLUDED						Valve used for system or component maintenance
2SB-15.8	2SB 21 SI TO REACTOR VESSEL THROTTLE VALVE	HIAW 1001-6	33	THROT	EXCLUDED						Valve used for system or component maintenance
2SB-15.9	2SB 21 SI TO REACTOR VESSEL THROTTLE VALVE	HIAW 1001-6	33	THROT	EXCLUDED						Valve used for system or component maintenance
2SB-16.1	2SB 21 FROM SI PUMP DISCH TO TEST LINE CHK	HIAW 1001-7	34	CLOSE	C	ACT-OPEN	SP-2088	E	Q		See Deferral Note A
2SB-16.2	2SB 21 FROM SI PUMP DISCH TO TEST LINE CHK	HIAW 1001-7	34	CLOSE	C	ACT-OPEN	SP-2088	E	Q		See Deferral Note A
2SB-16.3	2SB 21 REF WTR STG TANK OUTLET TO SI PUMP SUCT	HIAW 1001-6	33	CLOSE	C	ACT-OPEN	SP-2092A	E	R		See Deferral Note A
2SB-16.4	2SB 21 COLD LEG INJ LINE TO LOOP B COLD LEG CHK	HIAW 1001-6	33	CLOSE	C	ACT-CLOSE	SP-2070	E	R		See Deferral Note A
2SB-16.5	2SB 21 REACTOR VESSEL INJ LINE TO REAC VESSEL CHK	HIAW 1001-6	33	CLOSE	C	ACT-OPEN	SP-2092A	E	R		See Deferral Note A
2SB-16.6	2SB 21 COLD LEG INJ LINE TO LOOP A COLD LEG CHK	HIAW 1001-6	33	CLOSE	C	ACT-CLOSE	SP-2070	E	R		See Deferral Note A
2SB-16.7	2SB 21 REACTOR VESSEL INJ LINE TO REAC VESSEL CHK	HIAW 1001-6	33	CLOSE	C	ACT-OPEN	SP-2092A	E	R		See Deferral Note A
2SB-18.1	2SB 21 VAL HOUSING DRAIN @ MV - 32178	HIAW 1001-6	33	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-18.2	2SB 21 VAL HOUSING DRAIN @ MV - 32179	HIAW 1001-6	33	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-19.1	2SB 21 ACCUMULATOR #21 VENT	HIAW 1001-6	33	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-19.2	2SB 21 ACCUMULATOR #22 VENT	HIAW 1001-6	33	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-19.4	2SB 21 SI PUMP SUCT LINE VENT	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SB-20.1	2SB 21 ACCUMULATOR #21 LOCAL SAMPLE	HIAW 1001-6	33	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test



Valve Number	Sys	Description	p&ID	Code	Normal	Positin	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2SI-20-10	2SI	SAFETY INJECTION PUMP #22 DISCH LINE DRAIN	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-11	2SI	S1 PUMP #21 RECIRC LINE VENT	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-12	2SI	S1 PUMP #22 RECIRC LINE VENT	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-13	2SI	TEST LINE SHUT OFF DOWNSTREAM OF 2 FI 929	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-17	2SI	COLD LEG INJ LINE LOOP A COLD LEG DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-18	2SI	ACCUMULATOR 11 OUTLET LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-19	2SI	ACCUMULATOR 11 OUTLET LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-2	2SI	ACCUMULATOR #22 LOCAL SAMPLE	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-20	2SI	COLD LEG INJ TO #21 ACCUM INLET LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-21	2SI	71 ACCUM TO LOOP A COLD LEG - LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-22	2SI	COLD LEG INJ LINE TO LOOP A COLD LEG - DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-23	2SI	HOT LEG INJ LINE TO REAC VESSEL - LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-24	2SI	NITROGEN SUPPLY LINE DRAIN AT ACC 22	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-25	2SI	TEST LINE VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-26	2SI	21 ACCUM OUTLET LINE TEST LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-27	2SI	COLD LEG TO 22 ACCUM INLET LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-28	2SI	22 ACCUM TO LOOP B COLD LEG - LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-29	2SI	COLD LEG INJ LINE TO LOOP B COLD LEG - DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-3	2SI	COLD LEG INJECTION LINE VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-30	2SI	REACTOR VESSEL INJECT LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-31	2SI	NITROGEN SUPPLY LINE DRAIN AT ACC #21	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-33	2SI	R H R PUMP #21 SUCTION VENT	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-34	2SI	R H R PUMP #22 SUCTION VENT	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-35	2SI	REACT VSL INJ LINE TO REACT VSL - DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-36	2SI	COLD LEG INJ LINE TO LOOP B COLD LEG - DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-37	2SI	REACTOR VESSEL INJECT LINE - DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-38	2SI	COLD LEG-ACCUMULATOR 11 INLET VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-4	2SI	REACTOR VESSEL INJECT LINE - VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-41	2SI	RESID HEAT EXCH TO REACT VESSEL - LINE VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-42	2SI	RESID HEAT EXCH TO REACT VESSEL - LINE VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-43	2SI	RESID HEAT EXCH TO REACT VESSEL - LINE VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-45	2SI	21 ACCUM TO COLD LEG LOOP A LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-46	2SI	22 ACCUM TO COLD LEG LOOP B LINE VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-47	2SI	FROM RESID HT EXCH TO REACT VESSEL - DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-49	2SI	FROM RESID HT EXCH TO REACT VESSEL - VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-5	2SI	TEST LINE VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-50	2SI	FROM RESID HT EXCH TO REACT VESSEL - DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-51	2SI	FROM COLD LEG INJ LINE TO #22 ACCUM - DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-52	2SI	22 ACCUMULATOR TEST LINE - LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-53	2SI	22 ACCUMULATOR TEST LINE - LINE VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-54	2SI	21 ACCUMULATOR TEST LINE - LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-55	2SI	21 ACCUMULATOR TEST LINE - LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-56	2SI	21 ACCUMULATOR TEST LINE - LINE VENT	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-57	2SI	REACTOR VESSEL INJECT LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-58	2SI	COLD LEG INJ LINE TO REACT VESSEL - DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-59	2SI	21 SAFETY INJ PUMP CASE DRAIN	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-6	2SI	REF WTR STR TANK LOCAL SAMPLE	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-60	2SI	22 SAFETY INJ PUMP CASE DRAIN	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-61	2SI	21 SAFETY INJ PUMP SEAL PIPING - VENT	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-62	2SI	22 SAFETY INJ PUMP SEAL PIPING - VENT	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-63	2SI	21 SAFETY INJ PUMP SEAL PIPING - VENT	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-64	2SI	22 SAFETY INJ PUMP SEAL PIPING - VENT	HIAW 1001-7	34	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-65	2SI	12 ACCUMULATOR OUTLET - LINE DRAIN	HIAW 1001-6	33	CLOSE	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test

ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2SI-20-66	2SI	21 SI RECIRC PUMP SUCTION LINE DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-67	2SI	SI PUMPS SUCTION LINE DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-68	2SI	21 SI PUMP RECIRC LINE ORIFICE OUTLET VENT	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-69	2SI	22 SI PUMP RECIRC LINE ORIFICE OUTLET VENT	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-7	2SI	SAFETY INJECTION PUMP #21 CASING DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-70	2SI	21 SI RECIRC PUMP SUCTION LINE DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-71	2SI	RESID HEAT EXCH TO REACT VESSEL - LINE VENT	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-72	2SI	21 SI RECIRC PUMP DISCH LINE VENT	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-73	2SI	21 SI RECIRC PUMP DISCH LINE DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-74	2SI	21 SI RECIRC PUMP SUCTION LINE VENT	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-75	2SI	21 SI RECIRC PUMP DISCH TO 121 BAT FILL VENT	HIAW 1-41	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-8	2SI	SAFETY INJECTION PUMP #22 CASING DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-20-9	2SI	SAFETY INJECTION PUMP #21 DISCH LINE DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-21-1	2SI	3/4 IN FROM COLD LEG INJ LINE TO TEST LINE	HIAW 1001-6	33	CLOSE	EXCLUDED						Valve used for system control
2SI-21-2	2SI	3/4 IN FROM REACTOR VSL INJ LINE TO TEST LINE	HIAW 1001-6	33	CLOSE	EXCLUDED						Valve used for system control
2SI-25-1	2SI	ACCUMULATOR 21 RELIEF	HIAW 1001-6	33	CLOSE	C	ACT-BOTH	P3120-69-21B	SP	10Y		
2SI-25-2	2SI	ACCUMULATOR 22 RELIEF	HIAW 1001-6	33	CLOSE	C	ACT-BOTH	P3120-69-22B	SP	10Y		
2SI-26-1	2SI	LO HEAD SI TO RX VSL RELIEF	HIAW 1001-6	33	CLOSE	C	ACT-BOTH	P3120-69-2A	SP	10Y		
2SI-27-1	2SI	MV32208 LEAK OFF	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-27-2	2SI	MV32209 LEAK OFF	HIAW 1001-7	34	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-28-1	2SI	21 SI RECIRC PUMP CASING DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-30-1	2SI	21 SAFETY INJ PUMP BRG-HSG-DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-30-2	2SI	22 SAFETY INJ PUMP BRG-HSG-DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-30-3	2SI	21 SAFETY INJ PUMP OIL RESER DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-30-4	2SI	22 SAFETY INJ PUMP OIL RESER DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-30-5	2SI	21 SAFETY INJ PUMP BRG HSG - DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-30-6	2SI	22 SAFETY INJ PUMP BRG HSG - DRAIN	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-31-1	2SI	N2 SUPPLY LINE VENT	HIAW 1001-7	34	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2SI-4-1	2SI	21 SI PUMP SUCTION LINE RELIEF	HIAW 1001-7	34	CLOSE	C	ACT-BOTH	P3120-69-21A	SP	10Y		
2SI-4-2	2SI	22 SI PUMP SUCTION LINE RELIEF	HIAW 1001-7	34	CLOSE	C	ACT-BOTH	P3120-69-22A	SP	10Y		
2SI-6-1	2SI	ACG 12 IN OUTLET TO LOOP B COLD LEG	HIAW 1001-6	33	CLOSE	A, C	ACT-OPEN	SP-2092C	E	R		See Deferral Note A
							ACT-CLOSE	SP-2070	LT	R		
2SI-6-2	2SI	DOWNSTREAM OF CHECK VAL 2SI-6-1	HIAW 1001-6	33	CLOSE	A, C	ACT-OPEN	SP-2092C	E	R		See Deferral Note A
							ACT-CLOSE	SP-2269	LT	R		
2SI-6-3	2SI	ACG 12 IN OUTLET TO LOOP A COLD LEG	HIAW 1001-6	33	CLOSE	A, C	ACT-OPEN	SP-2092C	E	R		See Deferral Note A
							ACT-CLOSE	SP-2070	LT	R		
2SI-6-4	2SI	DOWNSTREAM OF CHECK VAL 2SI-6-3	HIAW 1001-6	33	CLOSE	A, C	ACT-OPEN	SP-2092C	E	R		See Deferral Note A
							ACT-CLOSE	SP-2269	LT	R		
2SI-7-1	2SI	FR RWST TO RHR PUMP SUCTION	HIAW 1001-7	34	CLOSE	C	ACT-OPEN	SP-2092B	E	R		See Deferral Note C
							ACT-CLOSE		E	R		See Deferral Note C
2SI-7-2	2SI	FR RWST TO RHR PUMP SUCTION	HIAW 1001-7	34	CLOSE	C	ACT-OPEN	SP-2092B	E	R		See Deferral Note C
							ACT-CLOSE		E	R		See Deferral Note C
2SI-8-1	2SI	FROM BORIC ACID TANKS TO SAFETY INJ PUMPS	HIAW 1001-7	34	OPEN	B	PAS-OPEN		PV	2Y		Remote Indication
2SI-8-2	2SI	FROM BORIC ACID TANKS TO SAFETY INJ PUMPS	HIAW 1001-7	34	CLOSE	B	PAS-CLOSE		PV	2Y		Remote Indication
2SI-9-1	2SI	COLD LEG INJECTION LINE TO LOOP B COLD LEG	HIAW 1001-6	33	CLOSE	C	ACT-OPEN	SP-2092A	E	R		See Deferral Note A
							ACT-CLOSE	SP-2070	E	R		
2SI-9-2	2SI	COLD LEG INJECTION LINE TO LOOP A COLD LEG	HIAW 1001-6	33	CLOSE	C	ACT-OPEN	SP-2092A	E	R		See Deferral Note A
							ACT-CLOSE	SP-2070	E	R		
2SI-9-3	2SI	FROM RESIDUAL HT EXCH TO REACTOR VESSEL	HIAW 1001-6	33	CLOSE	A, C	ACT-OPEN	SP-2092D	E	R		See Deferral Note A
							ACT-CLOSE	SP-2070	LT	R		
2SI-9-4	2SI	FROM RESIDUAL HT EXCH TO REACTOR VESSEL	HIAW 1001-6	33	CLOSE	A, C	ACT-OPEN	SP-2092D	E	R		See Deferral Note A
							ACT-CLOSE	SP-2070	LT	R		
2SI-9-5	2SI	FROM R H EXCH TO REACTOR VESSEL	HIAW 1001-6	33	CLOSE	A, C	ACT-OPEN	SP-2092D	E	R		See Deferral Note A

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2SI-9-6	2SI	FROM R H EXCH TO REACTOR VESSEL	HIAW 1001-6	33	CLOSE	A, C	ACT-CLOSE ACT-OPEN	SP-2070 SP-2092D	LT E	R R		See Deferral Note A
CV31244	2SI	N2 SUPPLY TO ACC HCV	HIAW 1001-6	33	CLOSE	A	PAS-CLOSE		PV	2Y		
CV31459	2SI	ACC AFTER OK TEST VLV	HIAW 1001-6	33	CLOSE	B	PAS-CLOSE	SP-2072 31	LT	R		
CV31460	2SI	TEST LINE - FROM 12" ACCUMULATOR 21 OUTLET	HIAW 1001-6	33	CLOSE	EXCLUDED			PV	2Y		Valve used for vent, drain, instrument or test
CV31461	2SI	ACC AFTER OK TEST VLV	HIAW 1001-6	33	CLOSE	B	PAS-CLOSE		PV	2Y		
CV31462	2SI	TEST LINE - FROM 12" ACCUMULATOR 22 OUTLET	HIAW 1001-6	33	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
CV31511	2SI	N2 SUPPLY TO 21 ACC ISOL	HIAW 1001-6	33	OPN/CLS	A	ACT-CLOSE		E	CS		See Deferral Note B
CV31512	2SI	N2 SUPPLY TO 22 ACC ISOL	HIAW 1001-6	33	OPN/CLS	A	ACT-CLOSE	SP-2072 31	LT	R		See Deferral Note B
CV31554	2SI	N2 SUPPLY TO ACC CONTMNT ISOL	HIAW 1001-6	33	OPN/CLS	A	ACT-CLOSE	SP-2072 31	E	Q		
CV31555	2SI	ACC TO RC DRAIN TNK	HIAW 1001-6	33	OPN/CLS	B	ACT-CLOSE	SP-2072 31	LT	R		See Deferral Note B
CV31556	2SI	ACC TO RC DRAIN TNK	HIAW 1001-6	33	OPN/CLS	B	ACT-CLOSE		E	CS		See Deferral Note B
MV32167	2SI	FR RH EXCH TO REACTOR VESSEL	HIAW 1001-6	33	OPEN	B	PAS-OPEN		PV	2Y		
MV32168	2SI	FR RH EXCH TO REACTOR VESSEL	HIAW 1001-6	33	OPEN	B	PAS-OPEN		PV	2Y		
MV32170	2SI	2 SAF INJ REAC VSL INJ ISOL MV B	HIAW 1001-6	33	CLOSE	B	ACT-OPEN	SP-2236	E	CS		See Deferral Note B
MV32171	2SI	2 SAF INJ LOOP B COLD LEG ISOL MV	HIAW 1001-6	33	OPEN	B	PAS-OPEN		PV	2Y		
MV32172	2SI	2 SAF INJ REAC VSL INJ ISOL MV A	HIAW 1001-6	33	CLOSE	B	ACT-OPEN	SP-2236	E	CS		See Deferral Note B
MV32173	2SI	2 SAF INJ LOOP A COLD LEG ISOL MV	HIAW 1001-6	33	OPEN	B	PAS-OPEN		PV	2Y		
MV32174	2SI	ACCUMULATOR 21 12 INCH OUTLET	HIAW 1001-6	33	OPEN	B	PAS-OPEN		PV	2Y		
MV32175	2SI	ACCUMULATOR 22 12 INCH OUTLET	HIAW 1001-6	33	OPEN	B	PAS-OPEN		PV	2Y		
MV32176	2SI	2 SAF INJ COLD LEG INJ ISOL MV	HIAW 1001-6	33	OPEN	B	PAS-OPEN		PV	2Y		
MV32177	2SI	2 SAF INJ REAC VSL INJ ISOL MV	HIAW 1001-6	33	OPEN	B	PAS-OPEN		PV	2Y		
MV32178	2SI	21 CONTM SMP B ISOL MV A1	HIAW 1001-6	33	CLOSE	A	ACT-BOTH	SP-2137	E	R	#3	See Deferral Note B
MV32179	2SI	21 CONTM SMP B ISOL MV A2	HIAW 1001-6	33	CLOSE	A	ACT-BOTH	SP-2072 30A SP-2137	LT E	R R	#3	See Deferral Note B
MV32180	2SI	21 CONTM SMP B ISOL MV B1	HIAW 1001-6	33	CLOSE	B	ACT-BOTH	SP-2137	E	R		See Deferral Note B
MV32181	2SI	21 CONTM SMP B ISOL MV B2	HIAW 1001-6	33	CLOSE	B	ACT-BOTH	SP-2137	E	R		See Deferral Note B
MV32182	2SI	REF WTR STR TNK OUTLET	HIAW 1001-7	34	CLOSE	B	ACT-OPEN	SP-2088	E	Q		
MV32183	2SI	REF WTR STR TNK OUTLET	HIAW 1001-7	34	CLOSE	B	ACT-OPEN	SP-2088	E	Q		
MV32184	2SI	BAST TO 21 & 22 SI PUMP SUCTION MV A	HIAW 1001-7	34	CLOSE	B	ACT-BOTH	SP-2088	E	Q		
MV32185	2SI	BAST TO 21 & 22 SI PUMP SUCTION MV B	HIAW 1001-7	34	CLOSE	B	ACT-BOTH	SP-2088	E	Q		
MV32186	2SI	BAST TO 21 & 22 SI PUMP SUCTION MV C	HIAW 1001-7	34	OPEN	B	PAS-OPEN		PV	2Y		
MV32187	2SI	RFLG WTR TO 21 RSDL HT RMVL PMP ISOL MV	HIAW 1001-7	34	OPEN	B	PAS-OPEN		PV	2Y		
MV32188	2SI	RFLG WTR TO 22 RSDL HT RMVL PMP ISOL MV	HIAW 1001-7	34	OPEN	B	PAS-OPEN		PV	2Y		
MV32190	2SI	SI PUMP #21 SUCTION LINE	HIAW 1001-7	34	OPEN	B	ACT-BOTH	SP-2236	E	CS		See Deferral Note B
MV32191	2SI	SI PUMP #22 SUCTION LINE	HIAW 1001-7	34	OPEN	B	ACT-BOTH	SP-2236	E	CS		See Deferral Note B
MV32204	2SI	SAF INJ TEST TO 21 RFLG WTR STOR TNK MV A	HIAW 1001-7	34	OPEN	B	ACT-BOTH	SP-2236	E	CS		See Deferral Note B
MV32205	2SI	SAF INJ TEST TO 21 RFLG WTR STOR TNK MV B	HIAW 1001-7	34	OPEN	B	ACT-BOTH	SP-2236	E	CS		See Deferral Note B
MV32208	2SI	FR RH EXCH TO SI PUMP 21 SUCT	HIAW 1001-7	34	CLOSE	B	ACT-OPEN	SP-2137	E	R		See Deferral Note B
MV32209	2SI	FR RH EXCH TO SI PUMP 22 SUCT	HIAW 1001-7	34	CLOSE	B	ACT-OPEN	SP-2137	E	R		See Deferral Note B
CV31412	2SS	2A SGB SAMPLE # SM-235 (OUTSIDE CNTMT)	NF-39238	20	OPEN	B	ACT-CLOSE		E	Q		
CV31413	2SS	2B SGB SAMPLE # SM-236 (OUTSIDE CNTMT)	NF-39238	20	OPEN	B	ACT-CLOSE		E	Q		
CV31639	2SS	2A SGB SAMPLE # SM-235 (INSIDE CNTMT)	NF-39238	20	OPEN	B	ACT-CLOSE		E	Q		
CV31640	2SS	2B SGB SAMPLE # SM-236 (INSIDE CNTMT)	NF-39238	20	OPEN	B	ACT-CLOSE		E	Q		
MV32406	2SS	PRZR STEAM SPACE SAMPLE VLV A	NF-39238	20	OPN/CLS	A	ACT-CLOSE	SP-2242	E	Q		
MV32407	2SS	PRZR STEAM SPACE SAMPLE VLV B	NF-39238	20	OPN/CLS	A	ACT-CLOSE	SP-2072 15 SP-2242	LT E	R Q		



## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
MV32408	2SS	PRZR LIQ SAMPLE VLV A	NF-39238	20	OPNCLS	A	ACT-CLOSE	SP-2072.15	LT	R		
								SP-2242	E	Q		
MV32409	2SS	PRZR LIQ SAMPLE VLV B	NF-39238	20	OPNCLS	A	ACT-CLOSE	SP-2072.16	LT	R		
								SP-2242	E	Q		
MV32410	2SS	LOOP B HOT LEG SMPL	NF-39238	20	OPNCLS	A	ACT-CLOSE	SP-2072.16	LT	R		
								SP-2242	E	Q		
MV32411	2SS	LOOP B HOT LEG SMPL	NF-39238	20	OPNCLS	A	ACT-CLOSE	SP-2072.17	LT	R		
								SP-2242	E	Q		
								SP-2072.17	LT	R		
SV33168	2SS	VCT TO GAS ANALYZER	HIAW 1-125	20	CLOSE	EXCLUDED						Valve used for system or component maintenance
2SM-10-1	2VC	SAMPLE RET LINE TO VOL CONTR TANK CHK	NF-39238	32	OPNCLS	C	ACT-CLOSE		E	R		See Deferral Note K
2SM-7-4	2VC	21 RHR LOOP SMPL NO SM - 4	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2SM-7-7	2VC	VOL CONT TANK GAS SPACE - SAMPLE NO SM-7	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-1-1	2VC	MV 32062 BY-PASS CHARGING PUMP SUCT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-10-1	2VC	DOWNSSTREAM OF CHARGING PUMP 21	HIAW 1001-5	32	OPNCLS	EXCLUDED	NOTE 11					Valve used for system control
2VC-10-2	2VC	DOWNSSTREAM OF CHARGING PUMP 22	HIAW 1001-5	32	OPNCLS	EXCLUDED	NOTE 11					Valve used for system control
2VC-10-3	2VC	DOWNSSTREAM OF CHARGING PUMP 23	HIAW 1001-5	32	OPNCLS	EXCLUDED	NOTE 11					Valve used for system control
2VC-11-119	2VC	BORIC ACID TANK #21 INLET	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-120	2VC	121 BA TNK OUTL TO 21 & 22 BA XFER PMP SUCT	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-121	2VC	121 BA TNK OUTL TO 21 & 22 BA XFER PMP SUCT	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-122	2VC	BORIC ACID TRANSFER PUMP #21 SUCTION	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-123	2VC	BORIC ACID TRANSFER PUMP #22 SUCTION	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-124	2VC	R M W TO BORIC ACID TRANSFER PUMP #21 SUCT	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-125	2VC	R M W TO BORIC ACID TRANSFER PUMP #22 SUCT	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-126	2VC	BA XFER PUMP #22 DISCH TO FILTER	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-127	2VC	BORIC ACID FILTER #21 INLET	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-128	2VC	BORIC ACID FILTER #21 OUTLET	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-129	2VC	BORIC ACID TRANSFER PUMP #22 DISCH	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-130	2VC	BORIC ACID FILTER TO BORIC ACID TANK #21	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-131	2VC	BORIC ACID FILTER TO BORIC ACID TANK #121	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-132	2VC	BA XFER PUMP #21 DISCH TO FILTER	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-133	2VC	BA FILTER TO BA BLENDER	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-139	2VC	BA XFER PUMP #21 & #22 SUCT CROSSOVER	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-141	2VC	BORIC ACID TANK #21 OUTLET	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-142	2VC	DNSTRM BA TRANSFER PUMPS-B A TK #121 INLET	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-143	2VC	BORIC ACID TRANSFER PUMP #21 DISCH	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-52	2VC	VC TANK INLET	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-57	2VC	BA BLENDER DOWNSSTREAM OF 2-FCV-110B	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-58	2VC	RMW TO CHARGING PUMPS SUCTION	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-59	2VC	BORIC ACID BLENDER TO SFP RWST & HT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-60	2VC	VC TANK #21 DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-11-64	2VC	ION EXCH FILTERS TO HOLD-UP TK #11 INLET	HIAW 1-40	6	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-65	2VC	HOLD-UP TANK #21 TO VENT HDR	HIAW 1-40	6	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-11-66	2VC	HOLD-UP TANK #21 TO BLDG EXHAUST	HIAW 1-40	6	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-67	2VC	HOLD-UP TANK #21 OUTLET	HIAW 1-40	6	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-11-68	2VC	HOLD-UP TANK #21 OUTLET TO DRAIN HDR	HIAW 1-40	6	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-13-1	2VC	VOLUME CONTROL TANK INLET CHK	HIAW 1001-5	32	OPNCLS	C	ACT-CLOSE		E	R		See Deferral Note K
2VC-13-2	2VC	CHEM MIX TK #21 OUTLET TO VC TK #21 OLET CHK	HIAW 1001-5	32	OPNCLS	C	ACT-CLOSE		E	CS		See Deferral Note K
2VC-13-3	2VC	FR BORIC ACID FILTER TO BORIC ACID BLENDER	HIAW 1001-5	32	OPNCLS	EXCLUDED	NOTE 11					Valve used for system control
2VC-14-1	2VC	SEAL WTR INJECT FILTERS TO RCP 21 CHK	HIAW 1001-4	31	THROT	A	ACT-CLOSE	SP-1279	E	CS		See Deferral Note G
								SP-2072.13A	LT	R		
2VC-14-2	2VC	SEAL WTR INJECT FILTERS TO RCP #22 CHK	HIAW 1001-4	31	THROT	A	ACT-CLOSE	SP-1279	E	CS		See Deferral Note G
								SP-2072.13B	LT	R		

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positr	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2VC-15-10	2VC	R C PUMPS TO S W FILTER DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-114	2VC	CHARGING PUMP #22 SUCT TO VC TANK - DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-115	2VC	CHEM MIXING TK #21 OUTLET TO V C TK OUTLET	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-12	2VC	REACT CLNT PUMPS TO SEAL WATER FILTER	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-14	2VC	UPSTREAM OF CV-31424 VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-140	2VC	LINE DRAIN - DOWNSTREAM OF REL VA 2VC-25-2	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-154	2VC	BORIC ACID TRANSFER PUMP #22 SUCT - DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-155	2VC	BORIC ACID TRANSFER PUMP #21 SUCT - DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-156	2VC	BORIC ACID TRANSFER PUMP #22 DISCH - DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-157	2VC	BORIC ACID TRANSFER PUMP #21 DISCH - DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-160	2VC	BORIC ACID BLENDER - SUCTION VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-161	2VC	22 SEAL WTR FILTER - INLET DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-164	2VC	BA FILTER TO BA BLENDER DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-166	2VC	SEAL WTR RET LINE TO SEAL WTR FILT #21 - VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-167	2VC	INLET TO #22 SEAL WTR FILTER - LINE VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-168	2VC	OUTLET FROM #22 SEAL WTR FILTER - VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-169	2VC	VGT PURGE TO HI LEVEL LOOP	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-182	2VC	21 BA FILTER DISCH LINE DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-27	2VC	VC TANK INLET - VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-31	2VC	BORIC ACID BLENDER INLET - VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-35	2VC	BORIC ACID FILTER TO R M W LINE - VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-36	2VC	BORIC ACID FILTER TO R M W LINE - VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-37	2VC	BORIC ACID FILTER TO CHARGING PUMP SUCT	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-38	2VC	BORIC ACID TO BLENDER FT-110 OUTLET	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-39	2VC	FR BA FILTER TO CHARGING PUMP DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-40	2VC	FR BA FILTER TO CHARGING PUMP SUCT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-41	2VC	BA BLENDER TO V C TK INLET LINE - DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-47	2VC	DOWNSTREAM OF S W FILTER - VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-48	2VC	DOWNSTREAM OF S W FILTER - DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-49	2VC	V C TANK INLET VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-5	2VC	2FT-175 & 177 BY-PASS VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-50	2VC	CHARGING PUMP #21 VENT	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-52	2VC	CHARGING PUMP #22 VENT	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-54	2VC	CHARGING PUMP #23 VENT	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-56	2VC	R W TO CHARGING PUMPS SUCT - DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-6	2VC	22 RCP SEAL #1 LEAKOFF	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-61	2VC	HOLD-UP TK #21 OUTLET DRAIN	HIAW 1-40	6	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-15-62	2VC	HOLD-UP TK #21 TO GAS ANALYZER - DRAIN	HIAW 1-40	6	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-1	2VC	21 REGENERATIVE HT EXCH INLET - VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-10	2VC	UPSTREAM OF CV-31349 - DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-12	2VC	UPSTRM EXCESS LETDOWN HT EXCH #21-VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-13	2VC	R C PUMP #21 SUCT VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-17	2VC	R C PUMP #21 SUCT - DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-2	2VC	21 REGENERATIVE HT EXCH OUTLET - DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-20	2VC	R C PUMP #22 SUCT - DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-21	2VC	21 RC PUMP SEAL INJECTION DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-22	2VC	22 RC PUMP SEAL INJECTION DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-23	2VC	R C PUMP #21 SUCT - VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-24	2VC	R C PUMP #22 SUCT - VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-25	2VC	R C PUMP #21 DISCH VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-26	2VC	R C PUMP #22 DISCH VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-3	2VC	CV-31420 BYPASS	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-32	2VC	R C PUMP #22 BY PASS VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test

## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2VC-16-33	2VC	R C PUMP #21 BY PASS VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-34	2VC	R C PUMP #22 BY PASS	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-35	2VC	R C PUMP #21 BY PASS	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-36	2VC	R C PUMP #22 BY-PASS DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-37	2VC	R C PUMP #21 BY-PASS DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-38	2VC	DOWNSTREAM OF 2-FIA-180	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-39	2VC	DOWNSTREAM OF 2-FIA-179	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-44	2VC	DOWNSTREAM OF 2-FIA-179 VENT	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-52	2VC	21 CHARGING PUMP DISCH VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-53	2VC	UPSTREAM OF 2-HCV-142 DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-54	2VC	DOWNSTREAM OF 2-HCV-142 DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-55	2VC	23 CHARGING PUMP DISCH DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-56	2VC	CHARGING PUMP #23 DISCH - VENT	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-57	2VC	SEAL WATER INJECTION FILTER #22 PURGE	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-58	2VC	SEAL WATER INJECTION FILTER #22 DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-6	2VC	21 REGENERATIVE HT EXCH INLET - DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-60	2VC	SEAL WATER INJECTION FILTER #21 PURGE	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-61	2VC	SEAL WATER INJECTION FILTER #21 DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-68	2VC	21 SEAL INJECTION FILTER FLUSHING DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-69	2VC	22 SEAL INJECTION FILTER FLUSHING DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-7	2VC	21 REGENERATIVE HT EXCH OUTLET - VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-73	2VC	22 REACT CLNT PUMP SUCTION DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-74	2VC	21 REACT CLNT PUMP SUCTION DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-76	2VC	SAMPLE LINE TO BORON MEASURING TANKS	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-77	2VC	FROM SEAL WTR INJECTION FILTERS - DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-78	2VC	FROM SEAL WTR INJECTION FILTERS - VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-79	2VC	LTDN ORIF ISOL VLVS INLET DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-8	2VC	UPSTREAM OF CV-31347 - DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-81	2VC	UPSTRM EXCESS LDWN HEAT EXCH 22 DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-82	2VC	DOWNSTREAM OF 2VC-16-38 VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-84	2VC	21 REGENERATIVE HT EXCH INLET - VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-85	2VC	UPSTRM EXCESS LTOWN HEAT EXCH 22 DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-87	2VC	REACTOR COOLANT PMP 22 SUCT-VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-88	2VC	21 RCP SEAL INJ LINE DRN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-89	2VC	22 RCP SEAL INJ LINE DRN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-9	2VC	UPSTREAM OF CV-31348 - DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-90	2VC	VENT-CHARGING PUMP 22 DISCH LINE	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-16-92	2VC	21 REGEN HX INLET DRAIN VALVE	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-17-1	2VC	CHARGING LINE CV-31420 BYPASS CHK	HIAW 1001-4	31	OPN/CLS	G	ACT-CLOSE		E	CS		See Deferral Note A
2VC-17-4	2VC	R C PUMP 22 BYPASS	HIAW 1001-4	31	OPN/CLS	EXCLUDED						Valve used for system control
2VC-17-5	2VC	R C PUMP #21 BYPASS	HIAW 1001-4	31	OPN/CLS	EXCLUDED						Valve used for system control
2VC-18-1	2VC	CHG PUMP #21 SUCT TO V C TANK INLET CHK	HIAW 1001-5	32	OPN/CLS	EXCLUDED	NOTE 11					Valve used for system control
2VC-18-2	2VC	CHG PUMP #22 SUCT TO V C TANK INLET CHK	HIAW 1001-5	32	OPN/CLS	EXCLUDED	NOTE 11					Valve used for system control
2VC-18-3	2VC	CHG PUMP #23 SUCT TO V C TANK INLET CHK	HIAW 1001-5	32	OPN/CLS	EXCLUDED	NOTE 11					Valve used for system control
2VC-2-1	2VC	VOL CONT TANK OUTLET	HIAW 1001-5	32	OPN/CLS	EXCLUDED	NOTE 11					Valve used for system control
2VC-2-2	2VC	RWV STOR TK TO CHARGING PUMP SUCT	HIAW 1001-5	32	OPN/CLS	EXCLUDED	NOTE 11					Valve used for system control
2VC-21-10	2VC	VC TANK TO VENT HDR	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-18	2VC	BORIC ACID BLENDER DISCH LOCAL SAMPLE	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-17	2VC	CHARGING PUMP #21 SUCT TO V C TANK	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-18	2VC	CHARGING PUMP 22 SUCT TO V C TANK	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-19	2VC	CHARGING PUMP 23 SUCT TO V C TANK	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-20	2VC	SEAL WTR FILTER 21 PURGE	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-21	2VC	SEAL WTR FILTER 21 DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test



## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2VC-21-22	2VC	22 SEAL WTR FILTER - PURGE CONN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-23	2VC	22 SEAL WTR FILTER - DRAIN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-43	2VC	HOLDUP TANK #11 TO GAS ANALYZER	HIAW 1-41	7	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-54	2VC	BORIC ACID TANK #21 DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-55	2VC	BATP MINIFLOW TO 21 BAST	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-56	2VC	21 BAST RECIRC INLET SAMPLE	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-57	2VC	BORIC ACID FILTER #21 VENT	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-58	2VC	BORIC ACID FILTER #21 DRAIN	HIAW 1-41	7	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-75	2VC	DWNSTRM OF EXS LETDN HEAT EXCH #21-DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-76	2VC	DOWNSTREAM OF CV 31425-VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-77	2VC	DOWNSTREAM OF CV 31425-DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-78	2VC	EXS LETDOWN TO 21 SEAL WATER FLTR & VENT	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-79	2VC	EXCESS LTON TO 21 SLWTR FILTER & DRAIN	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-21-9	2VC	VC TANK TO GAS ANALYZER	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-24-1	2VC	VOLUME CONTROL TANK #21 RELIEF	HIAW 1001-5	32	CLOSE	C	ACT-BOTH	P3120-75-2A	SP	10Y		
2VC-25-1	2VC	RC PUMPS DISCH LINE TO SEAL WTR FLTR RELIEF	HIAW 1001-4	31	CLOSE	C	ACT-BOTH	P3120-75-2B	SP	10Y		
2VC-25-2	2VC	LETDOWN LINE TO VOL CONT TK INLET RELIEF	HIAW 1001-5	32	OPNCLS	EXCLUDED	NOTE 4					Valve used for system or component maintenance
2VC-26-1	2VC	REGEN HEAT EXCH #21 LTON LINE OUTLT RELF	HIAW 1001-4	31	CLOSE	C	ACT-BOTH	P3120-75-2C	SP	10Y		
2VC-28-1	2VC	21 CHG PMP DISCH RELIEF	HIAW 1001-5	32	CLOSE	C	ACT-BOTH	P3120-75-21A	SP	10Y		
2VC-28-2	2VC	22 CHG PMP DISCH RELIEF	HIAW 1001-5	32	CLOSE	C	ACT-BOTH	P3120-75-22A	SP	10Y		
2VC-28-3	2VC	23 CHG PMP DISCH RELIEF	HIAW 1001-5	32	CLOSE	C	ACT-BOTH	P3120-75-23A	SP	10Y		
2VC-29-1	2VC	SEAL WTR HEAT EXCH #21 TO DRAIN HDR	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-29-2	2VC	SEAL WTR HEAT EXCH #21 TO DRAIN HDR	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-29-3	2VC	SEAL WTR HEAT EXCH #21 TO DRAIN HDR	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-3-1	2VC	HOLD-UP TANK #21 INLET	HIAW 1-40	6	PER SS	EXCLUDED						Valve used for system or component maintenance
2VC-3-2	2VC	HOLD-UP TANK #21 OUTLET	HIAW 1-40	6	PER SS	EXCLUDED						Valve used for system or component maintenance
2VC-3-8	2VC	VOL CONT TANK 21 OUTLET	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-31-14	2VC	21 SEAL WTR HT EXCH INLET PURGE CONN	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-39-1	2VC	DOWNSTREAM OF CHARGING PUMP 21	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system control
2VC-39-2	2VC	DOWNSTREAM OF CHARGING PUMP 22	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system control
2VC-39-3	2VC	DOWNSTREAM OF CHARGING PUMP 23	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system control
2VC-42-1	2VC	21 RCP SEAL #1 LEAKOFF	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-42-2	2VC	21 RCP SEAL #1 LEAKOFF	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-42-3	2VC	22 RCP SEAL #1 LEAKOFF	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-42-4	2VC	22 RCP SEAL #1 LEAKOFF	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-43-2	2VC	21 RCP SEAL #1 LEAKOFF	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-43-3	2VC	21 RCP SEAL #1 LEAKOFF	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-43-5	2VC	22 RCP SEAL #1 LEAKOFF	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-43-6	2VC	22 RCP SEAL #1 LEAKOFF	HIAW 1001-4	31	OPEN	EXCLUDED						Valve used for vent, drain, instrument or test
2VC-5-1	2VC	CHARGING PUMP #21 DISCHARGE	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-5-2	2VC	CHARGING PUMP #22 DISCHARGE	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-5-3	2VC	CHARGING PUMP #23 DISCHARGE	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-5-4	2VC	SEAL WTR INJECTION FILTERS BYPASS	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for system or component maintenance
2VC-6-1	2VC	UPSTREAM OF SEAL WATER FILTER 21	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-6-2	2VC	DOWNSTREAM OF SEAL WATER FILTER 21	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-6-3	2VC	UPSTREAM OF SEAL WATER HEAT EXCH 21	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-6-30	2VC	SEAL WTR FILTER #22 INLET	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-6-31	2VC	SEAL WTR FILTER #22 OUTLET	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-6-4	2VC	DOWNSTREAM OF SEAL WTR HEAT EXCH 21	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-6-5	2VC	CHARGING PUMP #21 SUCTION	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-6-6	2VC	CHARGING PUMP #22 SUCTION	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-6-7	2VC	CHARGING PUMP #23 SUCTION	HIAW 1001-5	32	OPEN	EXCLUDED						Valve used for system or component maintenance
2VC-6-8	2VC	SEAL WTR FILTERS #21 & #22 BY-PASS	HIAW 1001-5	32	CLOSE	EXCLUDED						Valve used for system or component maintenance



## ASME SECTION XI VALVES UNIT 2

Valve Number	Sys	Description	PSID	Code	Normal Dwg	Normal Positin	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
2VC-6-9	2VC	SEAL WTR HEAT EXCH #21 BY-PASS	HIAW 1001-5	32	CLOSE	EXCLUDED							Valve used for system or component maintenance
2VC-7-1	2VC	21 RCP SEAL #1 LEAKOFF BYPASS	HIAW 1001-4	31	CLOSE	EXCLUDED							Valve used for system or component maintenance
2VC-7-10	2VC	2-HCV-142 BY-PASS	HIAW 1001-5	32	CLOSE		A	PAS-CLOSE		PV	2Y		
									SP-2072.12	LT	R		
2VC-7-11	2VC	DOWNSTREAM OF 2-HCV-142	HIAW 1001-5	32	OPEN		A	ACT-CLOSE		E	CS		See Deferral Note G
									SP-2072.12	LT	R		
2VC-7-12	2VC	CHARGING PUMP #22 DISCH	HIAW 1001-5	32	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-7-13	2VC	CHARGING PUMP #23 DISCH	HIAW 1001-5	32	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-7-14	2VC	SEAL WTR INJECTION FILTER #22 INLET	HIAW 1001-5	32	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-7-15	2VC	SEAL WTR INJECTION FILTER #22 OUTLET	HIAW 1001-5	32	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-7-16	2VC	SEAL WTR INJECTION FILTER #21 INLET	HIAW 1001-5	32	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-7-17	2VC	SEAL WTR INJECTION FILTER 21 OUTLET	HIAW 1001-5	32	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-7-18	2VC	SEAL WTR TO #21 REACT COOLANT PUMP	HIAW 1001-4	31	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-7-19	2VC	SEAL WTR TO #22 REACT COOLANT PUMP	HIAW 1001-4	31	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-7-2	2VC	22 RCP SEAL #1 LEAKOFF BYPASS	HIAW 1001-4	31	CLOSE	EXCLUDED							Valve used for system or component maintenance
2VC-7-8	2VC	CHARGING PUMP #21 DISCH	HIAW 1001-5	32	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-7-9	2VC	UPSTREAM OF 2-HCV-142	HIAW 1001-5	32	OPEN	EXCLUDED							Valve used for system or component maintenance
2VC-8-1	2VC	UPSTREAM OF REGENERATIVE HEAT EXCH #21	HIAW 1001-4	31	OPEN		A, C	ACT-CLOSE		E	CS		See Deferral Note G
									SP-2072.12	LT	R		
2VC-8-10	2VC	DOWNSTREAM OF R C FILTER	HIAW 1001-5	32	OPN/CLS		C	ACT-CLOSE		E	CS		See Deferral Note K
2VC-8-11	2VC	BORIC ACID BLENDER SUCTION	HIAW 1001-5	32	OPN/CLS		C	ACT-CLOSE		E	CS		See Deferral Note K
2VC-8-13	2VC	BORIC ACID BLENDER TO V C TANK #21	HIAW 1001-5	32	OPN/CLS	EXCLUDED		NOTE 11					Valve used for system control
2VC-8-14	2VC	R M W TO CHARGING PUMPS SUCT	HIAW 1001-5	32	OPN/CLS		C	ACT-CLOSE		E	CS		See Deferral Note K
2VC-8-15	2VC	FR BORIC ACID FILTER TO R M W LINE	HIAW 1001-5	32	OPN/CLS	EXCLUDED		NOTE 11					Valve used for system control
2VC-8-2	2VC	DNSTREAM OF REGENERATIVE HEAT EXCH #21	HIAW 1001-4	31	OPN/CLS		C	ACT-CLOSE	SP-2237	E	CS		See Deferral Note A
2VC-8-3	2VC	21 REGEN HX AUX SPRAY TO 21 PRZR CV31421	HIAW 1001-4	31	OPN/CLS		C	ACT-CLOSE		E	CS		See Deferral Note K
2VC-8-4	2VC	R C PUMP #22 SUCTION	HIAW 1001-4	31	OPEN		A, C	ACT-CLOSE	SP-2166	E	R		See Deferral Note H
									SP-2072.13B	LT	R		
2VC-8-5	2VC	R C PUMP #21 SUCTION	HIAW 1001-4	31	OPEN		A, C	ACT-CLOSE	SP-2166	E	R		See Deferral Note H
									SP-2072.13A	LT	R		
2VC-8-6	2VC	R C PUMP #22 SUCTION	HIAW 1001-4	31	OPEN		C	ACT-CLOSE	SP-2166	E	R		See Deferral Note A
2VC-8-7	2VC	R C PUMP #21 SUCTION	HIAW 1001-4	31	OPEN		C	ACT-CLOSE	SP-2166	E	R		See Deferral Note A
2VC-9-1	2VC	21 BATP DISCH CHK VLV	HIAW 1-41	7	OPN/CLS	EXCLUDED		NOTE 11					Valve used for system control
2VC-9-2	2VC	22 BATP DISCH CHK VLV	HIAW 1-41	7	OPN/CLS	EXCLUDED		NOTE 11					Valve used for system control
CV31196	2VC	#22 BORIC ACID XFER PMP TO #21 BORIC ACID TANK	HIAW 1-41	7	OPEN	EXCLUDED		NOTE 11					Valve used for system control
CV31211	2VC	CHG LINE HCV	HIAW 1001-5	32	OPEN		A	ACT-CLOSE	SP-2281	E	CS		See Deferral Note G
									SP-2072.12	LT	R		
CV31212	2VC	BORIC ACID FILTER TO BORIC ACID BLENDER	HIAW 1001-5	32	THROT	EXCLUDED		NOTE 11					Valve used for system control
CV31213	2VC	BORIC ACID BLENDER TO VCT OUTLET	HIAW 1001-5	32	CLOSE	EXCLUDED		NOTE 11					Valve used for system control
CV31214	2VC	BORIC ACID BLENDER TO VCT INLET	HIAW 1001-5	32	CLOSE	EXCLUDED		NOTE 11					Valve used for system control
CV31222	2VC	EXCESS LTDN HX OUTLET	HIAW 1001-4	31	OPN/CLS		B	ACT-CLOSE		E	CS		See Deferral Note F
CV31230	2VC	2 REAC CLNT LOOP PZR LTDN LN ISOL	HIAW 1001-3	30	OPEN		B	ACT-CLOSE	SP-2162	E	CS		See Deferral Note B
CV31279	2VC	2 REAC CLNT LOOP PZR LTDN LN ISOL	HIAW 1001-3	30	OPEN		B	ACT-CLOSE	SP-2162	E	CS		See Deferral Note B
CV31347	2VC	LETDOWN ORIFICE ISOL	HIAW 1001-4	31	BY SS		A	ACT-CLOSE	SP-2162	E	CS		See Deferral Note G
									SP-2072.11	LT	R		
CV31348	2VC	LETDOWN ORIFICE ISOL	HIAW 1001-4	31	BY SS		A	ACT-CLOSE	SP-2162	E	CS		See Deferral Note G
									SP-2072.11	LT	R		
CV31349	2VC	LETDOWN ORIFICE ISOL	HIAW 1001-4	31	BY SS		A	ACT-CLOSE	SP-2162	E	CS		See Deferral Note G
									SP-2072.11	LT	R		
CV31420	2VC	REGENERATIVE HEAT EXCH CHARGING OUTLET	HIAW 1001-4	31	OPEN	EXCLUDED		NOTE 11					Valve used for system control
CV31421	2VC	21 REGEN HX AUX SPRAY TO 21 PRZR	HIAW 1001-4	31	CLOSE	EXCLUDED		NOTE 11					Valve used for system control
CV31422	2VC	EXCESS LETDOWN HEAT EXCH INLET	HIAW 1001-4	31	OPN/CLS		B	ACT-CLOSE		E	CS		See Deferral Note F
CV31424	2VC	EXS LETDOWN HEAT EXCH TO SEAL WTR FLTR	HIAW 1001-4	31	BY SS		B	PAS-NOTE 2		PV	2Y		

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Valve Number	Sys	Description	P&ID	Code	Normal Positn	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
CV31425	2VC	RCP #21 & #22 TO SEAL WATER FILTER	HIAW 1001-4	31	OPEN	EXCLUDED	NOTE 10					Valve used for system control
CV31426	2VC	RC PUMP #21 DISCH	HIAW 1001-4	31	OPEN	EXCLUDED	NOTE 10					Valve used for system control
CV31427	2VC	RC PUMP #22 DISCH	HIAW 1001-4	31	OPEN	EXCLUDED	NOTE 10					Valve used for system control
CV31430	2VC	LETDOWN CNTMT ISOL	HIAW 1001-4	31	OPEN	A	ACT-CLOSE	SP-2162	E	CS		See Deferral Note G
								SP-2072 11	LT	R		
MV32062	2VC	REF WTR TO CHARGING PUMPS SUCT	HIAW 1001-5	32	CLOSE	EXCLUDED	NOTE 11					Valve used for system control
MV32063	2VC	VOL CONT TK #21 OUTLET	HIAW 1001-5	32	OPEN	EXCLUDED	NOTE 11					Valve used for system control
MV32189	2VC	EMERG BORATION TO CHG PMPS ISOL MV	HIAW 1001-5	32	CLOSE	EXCLUDED	NOTE 11					Valve used for system or component maintenance
MV32194	2VC	SEAL RETURN CONT ISOL	HIAW 1001-4	31	OPEN	A	ACT-CLOSE	SP-2280	E	CS		See Deferral Note G
								SP-2072 14	LT	R		
MV32210	2VC	SEAL RETURN CONT ISOL	HIAW 1001-4	31	OPEN	A	ACT-CLOSE	SP-2280	E	CS		See Deferral Note G
								SP-2072 14	LT	R		
MV32235	2VC	2 RHR TO LTDN LINE MV	HIAW 1001-4	31	CLOSE	EXCLUDED						Valve used for system control
SV33185	2VC	VCT TO VENT HEADER	HIAW 1001-5	32	CLOSE	EXCLUDED	NOTE 3					
CV31619	2WL	SUMP A DISCH CNTMT ISOL VLV A	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-2284	E	Q		
								SP-2072 26	LT	R		
CV31620	2WL	SUMP A DISCH CNTMT ISOL VLV B	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-2284	E	Q		
								SP-2072 26	LT	R		
CV31731	2WL	RCDT TO GA CNTMT ISOL VLV A	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-2284	E	Q		
								SP-2072 21	LT	R		
CV31732	2WL	RCDT TO GA CNTMT ISOL VLV B	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-2284	E	Q		
								SP-2072 21	LT	R		
CV31733	2WL	RCDT TO VENT HDR CNTMT ISOL VLV A	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-2284	E	Q		
								SP-2072 4	LT	R		
CV31734	2WL	RCDT TO VENT HDR CNTMT ISOL VLV B	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-2284	E	Q		
								SP-2072 4	LT	R		
CV31735	2WL	RCDT DISCH CNTMT ISOL VLV A	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-2284	E	Q		
								SP-2072 5	LT	R		
CV31736	2WL	RCDT DISCH CNTMT ISOL VLV B	HIAW 1-123	N/A	BY SS	A	ACT-CLOSE	SP-2284	E	Q		
								SP-2072 5	LT	R		
2ZH-4-1	2ZH	201 SWITCHGEAR UNIT CLR - (AUX BLDG) INLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-10	2ZH	21 RHR PIT UNIT CLR (AUX BLDG) OUTLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-11	2ZH	22 RHR PIT UNIT CLR (AUX BLDG) INLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-12	2ZH	22 RHR PIT UNIT CLR (AUX BLDG) OUTLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-2	2ZH	201 SWITCHGR UNIT CLR - (AUX BLDG) OUTLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-3	2ZH	202 SWITCHGR UNIT CLR - (AUX BLDG) INLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-4	2ZH	202 SWITCHGR UNIT CLR - (AUX BLDG) OUTLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-5	2ZH	25 SWITCHGR UNIT CLR (TURB BLDG) INLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-6	2ZH	25 SWITCHGR UNIT CLR (TURB BLDG) OUTLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-7	2ZH	26 SWITCHGR UNIT CLR (TURB BLDG) INLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-8	2ZH	26 SWITCHGR UNIT CLR (TURB BLDG) OUTLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-4-9	2ZH	21 RESID HT REM PIT UNIT CLR (AUX BLDG) INLET	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-6-1	2ZH	201 SWITCHGR UNIT COOLER - INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED						Valve used for system or component maintenance
2ZH-6-2	2ZH	202 SWITCHGR UNIT COOLER - INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2ZH-6-3	2ZH	25 SWITCHGR UNIT COOLER - INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2ZH-6-4	2ZH	26 SWITCHGR UNIT COOLER - INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2ZH-6-5	2ZH	21 RESID HT REM PIT UNIT COOLER - INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2ZH-6-6	2ZH	22 RESID HT REM PIT UNIT COOLER - INLET DRAIN	NF-39603-3	28	CLOSE	EXCLUDED						Valve used for vent, drain, instrument or test
2ZH-9-1	2ZH	201 SWITCHGR UNIT COOLER (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-9-2	2ZH	202 SWITCHGR UNIT COOLER (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-9-3	2ZH	25 SWITCHGR UNIT COOLER (TURB BLDG)	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-9-4	2ZH	26 SWITCHGR UNIT COOLER (TURB BLDG)	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
2ZH-9-5	2ZH	21 RESID HT REM PIT UNIT CLR (AUX BLDG)	NF-39603-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance

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Valve Number	Sys	Description	P&ID	Code Dwg	Normal Positin	Vlv Category	Vlv Function	Test Proc	Test Type	Test Freq	Relief Request	Comments
22H-9-6	22H	22 RESID HT REM PIT UNIT CLR (AUX BLDG)	NF-36903-3	28	OPEN	EXCLUDED						Valve used for system or component maintenance
CV31314	22P	INSERVICE PURGE EXH ISOL B	NF-36902-2	N/A	FLANGED	A	ACT-CLOSE		E	AR		See Deferral Note G
CV31315	22P	INSERVICE PURGE EXH ISOL A	NF-36902-2	N/A	FLANGED	A	ACT-CLOSE		LT	R		See Deferral Note G
CV31627	22P	CNTMT VAC BRKR PWR OP	NF-36902-2	N/A	CLOSE	A	ACT-BOTH	SP-2130	E	Q		
CV31628	22P	CNTMT VAC BRKR PWR OP	NF-36902-2	N/A	CLOSE	A	ACT-BOTH	SP-2072.41A	LT	R		
CV31630	22P	CNTMT VAC BRKR GRAV OP	NF-36902-2	N/A	CLOSE	A, C	ACT-BOTH	SP-2130	E	Q		
CV31631	22P	CNTMT VAC BRKR GRAV OP	NF-36902-2	N/A	CLOSE	A, C	ACT-BOTH	SP-2072.41A	LT	R		
CV31635	22P	INSERVICE PURGE SUPPLY ISOL B	NF-36902-2	N/A	FLANGED	A	ACT-CLOSE	SP-2130	E	Q		See Deferral Note G
CV31636	22P	INSERVICE PURGE SUPPLY ISOL A	NF-36902-2	N/A	FLANGED	A	ACT-CLOSE	SP-2072.41B	LT	R		See Deferral Note G
CV39413	22X	COOLING WATER TO 21 & 23 FCU	NF-86172-1	41	BY SS	B	ACT-OPEN	SP-1245	E	Q		
CV39414	22X	21& 23 FCU CHILLED WATER SUPPLY CV	NF-86172-1	41	BY SS	B	ACT-CLOSE	SP-1245	E	Q		
CV39415	22X	COOLING WATER TO 22 & 24 FCU	NF-86172-1	41	BY SS	B	ACT-OPEN	SP-1245	E	Q		
CV39416	22X	22& 24 FCU CHILLED WATER SUPPLY CV	NF-86172-1	41	BY SS	B	ACT-CLOSE	SP-1245	E	Q		
CV39417	22X	21 SHROUD CLG COILS TR A CW SUPPLY CV	NF-86172-1	41	OPEN	B	ACT-CLOSE	SP-2297	E	Q		
CV39418	22X	22 SHROUD CLG COILS TR B CW SUPPLY CV	NF-86172-1	41	OPEN	B	ACT-CLOSE	SP-2297	E	Q		
CV39419	22X	21 SHROUD CLG COILS TR A CW SUPPLY CV	NF-86172-1	41	OPEN	B	ACT-CLOSE	SP-2297	E	Q		
CV39420	22X	22 SHROUD CLG COILS TR B CW SUPPLY CV	NF-86172-1	41	OPEN	B	ACT-CLOSE	SP-2297	E	Q		
CV39421	22X	COOLING WATER FROM 21 & 23 FCU	NF-86172-1	41	BY SS	B	ACT-OPEN	SP-1245	E	Q		
CV31422	22X	22& 24 FCU CHILLED WATER SUPPLY CV	NF-86172-1	41	BY SS	B	ACT-CLOSE	SP-1245	E	Q		
CV31423	22X	COOLING WATER FROM 22 & 24 FCU	NF-86172-1	41	BY SS	B	ACT-OPEN	SP-1245	E	Q		
CV31424	22X	21& 23 FCU CHILLED WATER SUPPLY CV	NF-86172-1	41	BY SS	B	ACT-CLOSE	SP-1245	E	Q		

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DEFERRAL NOTE A

The following valves will not be stroked on a quarterly basis for the following reasons:

AF-15-9, 10; AF-14-1, 3

These valves are part stroked open quarterly and are full stroked each cold shutdown. Full stroking of the check valves open each quarter is impractical since it requires sending full flow to the steam generators and this causes thermal shocking of the Aux. Feedwater Lines as they enter the Steam Generator. Additionally this test does not address verification of the check valve closed. Verification that the check valve closes can be done by imposing a pressure downstream of the check and measurement of pressure. These complex tests are not warranted for the information received. The valve will be cycled per the Code each cold shutdown.

AF-16-1, 2; AF-15-1, 2, 3, 4

These valves are stroked each cold shutdown to a position required for the system to perform its safety function. This is accomplished by measuring flow through the check valve while the aux feedwater pump is discharging to each steam generator. The valves cannot be partial or full stroked quarterly since this causes thermal shocking of the aux feedwater lines as they enter the steam generator.

Stroking these valves requires cycling of valves which are required by Technical Specification to be locked open and the mispositioning of which causes a compromise of the safety function of the system. Such risk is not warranted by the additional information obtained by increasing the stroke interval of these valves.

Also, testing to verify the obturator travels to the seat on cessation of flow each cold shutdown as schedule permits.

CC-3-3, 4; CC-5-1, 2

These valves are full stroked open and tested to verify the obturator travels to the seat on cessation of flow each cold/refueling shutdown. Testing the valve closed on a quarterly basis is impractical since it potentially interrupts cooling water flow from the reactor coolant pumps and thus effects plant reliability.

F-8-1, 2; CV-31098, 99; RS-19-1, 2

These valves are tested to verify they close each cold/refueling shutdown. Testing the valves quarterly is impractical since such testing requires a Plant shutdown.

SI-6-1, 2, 3, 4; SI-9-3, 4, 5, 6.

With the reactor vessel head removed, these check valves are full stroked. Each valve is also verified to close and back leakage measured during refueling shutdown, and plant start-up operations. It is impractical to stroke the valves quarterly or at cold shutdown. Quarterly testing is prevented because system design and cold shutdown testing cannot be performed except when Reactor Vessel Head is removed and the refueling pool is partially flooded in preparation for refueling. These valves will be tested in accordance with the Code as described above.



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DEFERRAL NOTE A (CONT'D)

SI-16-4, 5, 6, 7; SI-9-1, 2

With the reactor vessel head removed, these check valves are full stroked. Each valve is also verified to close during refueling shutdown and plant start-up operations. The valves are not pressure isolation valves, therefore back leakage is not a Code requirement. It is impractical to stroke valves except at refueling shutdown when the reactor head is removed.

VC-8-2; VC-17-1

These valves are in piping which provides charging flow to the reactor coolant system. Interrupting flow to test the check valve would require placing excess letdown in service, removing normal charging and implore a thermal cycle on the letdown system nozzles. The valves are tested in accordance with the Code each cold shutdown.

VC-8-6, 7

These valves are in piping which provides seal injection flow to the reactor coolant pumps and it's impractical to verify the valves close on cessation of flow since such testing could result in seal failure. Possible foreign material entry and excessive valves manipulations could damage RCP seals. The valves are tested in accordance with the Code each refueling shutdown.

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DEFERRAL NOTE B

Exercising these valves quarterly or at cold shutdown requires removal of safeguards equipment from service and requires excessive system or component manipulation in order to establish the proper test conditions. This coupled with the possibility of errors in restoration of safeguards equipment or the occurrence of an event with abnormal system lineups could result in unsafe operation of the plant which is not warranted for the type of testing to be accomplished. Specifically:

CV-31226, 31255

These valves are in piping which provides let-down flow to the reactor coolant system. Interrupting flow to test these valves would require placing excess letdown in service, removing normal charging and impose a thermal cycle on the letdown/charging system nozzles. Valves will be tested at cold shutdown.

CV-31231, 32

These valves are stroked open and closed during cool down operation. Stroking these valves with the RCS at pressure causes a loss of one of the pressure boundaries of the reactor coolant system and during this stroking results in a small loss of RCS inventory. Valves will be tested at cold shutdown.

HC-1-3, 4, 5, 6; SV-33990, 991

These valves are stroked open and closed each cold shutdown during post-LOCA hydrogen control system valve cycling. Valve cycling requires opening manual valves required by Technical Specification to be closed.

MV-32067, 69

The valves provide a pressure boundary between RCS and SI. Cycling the valves with RCS at pressure challenges Technical Specification pressure isolation valves. The valves are cycled at CSD.

MV-32202, 203

Stroking these valves removes the mini flow protection for the SI pumps, and therefore requires removal of both SI pumps from service. The valves are cycled at cold shutdown.

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DEFERRAL NOTE B (CONT'D)

MV-32075, 76, 77, 78

These valves will be cycled at refueling shutdown. The valves are the boundary between RHR and containment Sump B. Cycling valves contaminates the Sump.

MV-32098, 099, 096, 097

Stroking these valves requires the use of electrical jumpers and closing breakers required by the Technical Specification to be open. MV-32096 and MV-32097 are interlocked with MV-32098 and 32099 to provide a continuous suction for the CS pumps. Testing these valves (which would require a Technical Specifications change) is impractical except at refueling due to the need for excessive manipulation of safety related equipment to perform the testing.

MV-32162, 163

Stroking these valves results in entering an LCO as required by Technical Specification. Safety function is to close to isolate RWST during SI recirc mode. Other valves with similar functions are locked closed to prevent cycling during normal operation. See MV-32206, 207, below. Valves will be tested at cold shutdown.

MV-32206, 207

The power supply to these valves is required by Technical Specification to be in the OFF position. Cycling these valves requires turning the power supply to the ON position. To comply with Technical Specification valves will be cycled at cold shutdown.

SV-37035, 36, 37, 38, 39, 40

Stroking of these could cause a small loss of coolant accident from the RCS. Therefore, the testing will be done each refueling. The justification for this frequency was included in NSP letter to the NRC dated July 6, 1981, and was agreed to by Lawrence Livermore National Laboratory Technical Evaluation Report (TER) February 23, 1983. The TER was included as enclosure 2 of the NRC SER dated September 19, 1983.



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DEFERRAL NOTE B (CONT'D)

CV-31441, 443, 444, 446

Cycling these valves results in a loss in accumulator nitrogen inventory, or borated water inventory. The valves will be full stroked in accordance with the Code at cold shutdown.

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DEFERRAL NOTE C

The quarterly test of the RHR pumps recirculates the fluid in the RHR loop. The recirculation line returns to the suction line down stream of SI-7-1(-2). Because there is no flow path available other than this recirculation, there is no loss of inventory from this loop. This results in no flow from the RWST and makes stroking SI-7-1(-2) impractical.

SI-7-1, 2

Exercising these valves quarterly or at cold shutdown requires transfer of inventory from the RWST to waste or to the RCS and then to waste. The benefits of this exercise is deemed not worth the effort. The valves will be exercised each refueling shutdown.

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DEFERRAL NOTE D

Exercising these valves open at cold shutdown requires removal of safeguards equipment from service and excessive system or component manipulation in order to establish the proper test conditions. This coupled with the possibility of errors in the restoration of safeguards equipment or the occurrence of an event with abnormal system line-ups could result in unsafe operation of the plant which is not warranted for the type of testing to be accomplished. Specifically:

SI-10-1, 2

Stroking these valves open at cold shutdown requires opening valves which are closed for protection of the Reactor Coolant System against over-pressurization. Testing valves closed more than once each refueling cycle is impractical. These valves will be tested in accordance with the Code at refueling shutdown.

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DEFERRAL NOTE E

The following valve will not be stroked on a quarterly basis for the following reasons:

RH-6-1

Installation of the valve is such that it cannot be exercised open during normal plant operation. Isolation of the valve for exercising requires removal of the letdown line and one loop of the RHR system from service. The close function of the valve is verified on a continuous basis by a high pressure alarm which sounds when back leakage occurs. These valves will be tested in accordance with the Code at Cold Shutdown.

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DEFERRAL NOTE F

The following valve will not be stroked on a quarterly basis for the following reasons:

MV-32121, 120, 266, 267

Exercising these valves during power operation requires establishing an abnormal system lineup. Should inadvertent isolation of the cross connected portions of the system occur (either through operator error in establishing the lineup or from spurious signals from instrumentation in the valve closure circuitry) considerable damage to the reactor coolant pumps and other reactor auxiliary equipment could result. The valves will be stroked each cold shutdown.

CV-31330, 31210

Cycling these excess letdown isolation valves introduces upsets in the operation of charging, seal injection and letdown systems. Possible foreign material entry and system upsets could damage the RCP seals. The valves will be stroked at cold shutdown.

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DEFERRAL NOTE G

These containment isolation valves are leak rate tested in accordance with 10CFR 50 Appendix J, and are classified TYPE A valves. It is impractical to stroke these valves quarterly for one or more of the following reasons.

- 1). Stroking the valves results in a loss of redundancy and requires logging equipment Out of Service and entering a limiting condition of operation as required by Technical Specification.
- 2). Requires manual operator action in response to design basis accidents. Administrative control over the positioning of the valve is required and unnecessary disrupts Plant operations.
- 3). Creates operational problems because of the conditions created by the stroking of a normal open/or normal closed valve.

CV-31310, 31311, 31633, 31634

These containment purge supply and exhaust valves are blind flanges out of service during operation. When they are used for containment integrity, the valves are exercised and leak tested prior to being placed in service.

CV-31339, 31325, 31326, 31327

Cycling these containment isolation valves requires removal of RCS charging and letdown, causes thermal cycles on system nozzles, and introduces upsets in the operation of charging, seal injection and letdown systems. Stroke at cold shutdown.

MV-32103, 5

The CS pump discharge MOV are opened only on "P" signal, HI containment pressure. There is no control switch to open/close this MOV.

Opening the discharge MOV using electrical jumpers with the suction valve open allows borated water to enter the containment spray header. At the conclusion of such a test the water needs to be drained to prevent formation of boric acid crystals in the spray header. This operation requires the opening of a normally closed containment integrity valve. The use of electrical jumpers and excessive valve manipulation and resultant potential for errors make cycling the CS pump discharge MOV on a quarterly basis impractical. In addition, surveillance history shows these MOV's have never failed to operate after some 20 years of testing. These valves will be cycled at cold shutdown.



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DEFERRAL NOTE 6 (CONT'D)

MV-32199, 32166

Cycling these seal water return containment isolation motor operated valves with RCS pressure causes the lifting of seal water return safety-relief valve. These valves will be cycled each cold shutdown.

RC-3-1

Cycling this two inch diameter, normally closed, check valve, located inside containment, closed requires, adding RMU water to PRT, followed by venting and draining of piping and taking administrative control over opening/closing of containment isolation valves. The valve will be cycled each cold shutdown.

RC-5-1

Cycling this one inch diameter, normally closed, check valve, located inside containment, closed requires adding nitrogen to the PRT followed by venting of piping and taking administrative control over opening/closing of containment isolation valves. The valve will be cycled each cold shutdown.

VC-8-1; CV-31198, VC-7-11

Cycling these valves interrupt charging and letdown flow to/from the Reactor Coolant System, causing thermal cycles in piping nozzles. The valves will be cycled each cold shutdown.

VC-14-1, 2

Cycling these manual valves at power interrupts seal injection to the operating reactor coolant pumps. The valves will be cycled each cold shutdown.

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DEFERRAL NOTE H

Exercising these valves more frequently than refueling shutdown creates extensive operational problems. Specifically:

CV-31740, CV-31741

Cycling of these valves will isolate all instrument air in containment. This will cause all of the air operated control valves to go to their failed position.

VC-8-4, 5

Cycling these check valves at power interrupts seal injection to the operating reactor coolant pumps. The valves will be cycled each refueling shutdown. Foreign material entry and valve manipulations could cause RCP seal damage following testing at cold shutdown.

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DEFERRAL NOTE J

The following valves will not be stroked on a quarterly basis for the following reasons:

AF-13-1

This valve will be full stroked each cold shutdown. The valve cannot be stroked open quarterly since this would result in thermal shock to the Aux Feedwater lines as they enter the Steam Generator. In addition, quarterly stroking would require cross tying the Aux Feedwater Systems for both units. The valve is tested closed quarterly.

MV-32023, 32024

These valves are full stroked each cold shutdown. Stroking these valves quarterly is impracticable. It would isolate all Feedwater Flow to an individual Steam Generator

MV-32025, 27

The purpose of these valves is to provide a backup supply of makeup to the steam generators. Normal supply is demineralized water from the condensate storage tanks (Technical Specification lower volume limit of 100,000 gallons) with backup supply from the river.

These valves receive no auto open signal. They are manually opened. Stroking the valves breaks one of the barriers between the demineralized water and the river water and increases potential of river water to steam generator contamination. Valves will be stroked at refueling shutdown.

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DEFERRAL NOTE K

Quarterly testing prohibited by Plant Technical Specifications. These valves will not be tested quarterly as they are integral components of systems that are required to be operable during unit operations.

CA-11-1

This valve will not be tested quarterly as doing so requires isolating CA from both trains of CS, taking CS from service. Furthermore, testing this valve at CSD requires excessive valve manipulation, line evacuation, an external source of pressurization and introduces the possibility of pump cavitation due to the introduction of air into the system. This valve will be tested in accordance with the Code at refueling shutdown.

CC-14-5, 6, CC-18-1, 2, CC-61-1, 2

These valves and their associated piping supply CC to the RCP's. The continuous flow is an indication that the valves stroke open. The cessation of flow required to close the valves would require declaring the RCP's out-of-service. These valves are tested in accordance with the Code at cold Shutdown.

RH-3-1, 2

These valves and their associated piping provide suction to the RHR. As the RCS Loop must remain closed above CSD, these check valves cannot be stroked during power operations. At CSD the cessation of flow required to stroke these valves closed would require removing RHR from service. These valves will be tested in accordance with the Code at refueling shutdown.

RS-15-1, 2

Will not be tested quarterly as doing so would require a unit shutdown. These valves will be tested in accordance with the Code at cold shutdown.

SM-10-1

This valve will be tested in accordance with the Code at Refueling Shutdown. This valve is tied directly to the Reactor Coolant Pump Seal Water Return Line and the Volume Control Tank (VCT). Testing of the valve cannot be done quarterly because it requires removal of the seal water return line, and excessive valve manipulation makes it impracticable to test this valve at cold shutdown.

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DEFERRAL NOTE K (COND'T)

VC-8-10; VC-8-11; VC-8-14

These valves will be tested in accordance with the Code at refueling shutdown. Testing these valves requires the removal of the boric acid/reactor make up water blender from service. Excessive valve manipulations and system alignments are needed to conduct the test. The benefits of the exercise are not deemed worth the effort.

VC-8-3

This valve will be tested in accordance with the Code at cold shutdown. This valve is the boundary valve between auxiliary spray and the RCS Pressurizer. It is located in containment. Full stroke testing the valve quarterly is not practical, and will produce thermal cycles on the pressurizer spray nozzle.

VC-13-1, 2

These valves will not be tested quarterly. The valve/system manipulations required to install an external pressure source and pressure indication make quarterly testing impractical. The test medium for VC-13-1 is hydrogen and Xenon from the VCT. Depressurizing the piping down stream of VC-13-1 introduces industrial safety hazards not warranted for the testing to be accomplished. The valve will be tested at refueling shutdown.

The test medium for VC-13-2 is charging pump suction fluid. Depressurizing the piping down stream of VC-13-2 requires opening two normally closed valves, installing a pressure gauge & venting the normally closed chemical mixing tank. This complex test is not warranted & is considered impractical. This valve will be tested in accordance with the code at cold shut down.

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DEFERRAL NOTE L

These valves will not be tested quarterly as the system manipulations required outweigh the value of information obtained through testing. For the following reasons:

CC-23-1

These valves will not be tested quarterly. Doing so would require excessive valve manipulation to install an external pressure source, isolate the excess pressure source, isolate the excess letdown heat exchanger and drain the heat exchanger and associated piping. Valve stroke indication would then require the addition of pressure instrumentation. This work would be done in containment at power. Because this heat exchanger and its associated piping is out-of-service during normal unit operations and because there is a motor valve providing redundant reverse flow protection, this valve will be tested in accordance with the Code at cold shutdown using non-intrusive diagnostic methods.

CS-16, 17

These valves will not be full stroke tested quarterly or at cold shutdown. Stroking the valve open/closed requires opening the CS pump discharge motor valve and the addition of borated water into the CS piping, taking the CS pump breaker out-of-service, draining CS piping and opening and closing motor operated valves using electrical jumpers. Also, testing these valves requires opening manual containment isolation valves.

These valves are part stroked open quarterly during the running of the CS pump surveillance test and will be full stroked in accordance with the code on a refueling basis. Stroking more frequently is not warranted given the complex nature of the testing.

CS-18, 19

These valves will not be full stroke tested quarterly or at cold shutdown. Stroking the valve open/closed requires opening the CS pump discharge motor valve and the addition of borated water into the CS piping, taking the CS pump breaker out-of-service, draining CS piping and opening and closing motor operated valves using electrical jumpers. Also, testing these valves requires opening manual containment isolation valves. These valves will be tested at refueling shutdown.



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DEFERRAL NOTE L (CONT'D)

HC-2-1, 2

These valves will not be tested quarterly. They are stroked open and closed each cold/refueling shutdown during POST-LOCA Hydrogen Control System valve cycling and 10 CFR50 Appendix J leak testing. Quarterly testing would require entering containment at power, providing an external pressure source and additional pressure indication. The benefit of the additional testing is not significant to warrant the extensive test procedure as these valves are not in service under normal unit operation minimizing the probability of degradation over time between refueling. A motor valve provides redundant reverse flow protection to each check valve. The valves will be tested in accordance with the Code for stroke at cold shutdown and for leak tightness at refueling shutdown.

RH-3-3, 4

These valves are partially stroked open quarterly. Testing to provide closure would require entering an LCO by removing a train of RHR from service, connection an external pressure source downstream of the valve, installation of additional pressure indication and entrance into a confined space area. The amount of additional information obtained by adding the closure test to a procedure that already tests the open stroke does not justify the extensive system manipulation required. These valves will be tested in accordance with the Code at cold shutdown.

CV-31381, CV-31411

These valves are controlled by temperature of the CC system. The valves fail safe open on loss of air. The valves are cycled full open on a monthly period to flush the cooling water side of the CC heat exchangers. Failing the valve from the close to open subjects the thermal barrier to a thermal cycle therefore this test requires taking the CC heat exchanger out of service and entering a LCO. The valves are in the I&C PM Program and are serviced, inspected, tested and overhauled on a three year period. Failing the valve open on a quarterly period is not prudent use of resources given the extensive testing and maintenance being performed on these valves and given their maintenance and operating history.

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DEFERRAL NOTE A

The following valves will not be stroked on a quarterly basis for the following reasons:

AF-15-11, 12; AF-14-5, 7

These valves are part stroked open quarterly and are full stroked each cold shutdown. Full stroking of the check valves open each quarter is impractical since it requires sending full flow to the steam generators and this causes thermal shocking of the Aux. Feedwater Lines as they enter the Steam Generator. Additionally this test does not address verification of the check valve closed. Verification that the check valve closes can be done by imposing a pressure downstream of the check and measurement of pressure. These complex tests are not warranted for the information received. The valve will be cycled per the Code each cold shutdown.

AF-16-3, 4; AF-15-5, 6, 7, 8,

These valves are stroked each cold shutdown to a position required for the system to perform its safety function. This is accomplished by measuring flow through the check valve while the aux feedwater pump is discharging to each steam generator. The valves cannot be partial or full stroked quarterly since this causes thermal shocking of the aux feedwater lines as they enter the steam generator.

Stroking these valves requires cycling of valves which are required by Technical Specification to be locked open and the mispositioning of which causes a compromise of the safety function of the system. Such risk is not warranted by the additional information obtained by increasing the stroke interval of these valves.

Also, testing to verify the obturator travels to the seat on cessation of flow each cold shutdown as schedule permits.

ZCC-3-3, 4; ZCC-5-1, 2

These valves are full stroked open and tested to verify the obturator travels to the seat on cessation of flow each cold/refueling shutdown. Testing the valve closed on a quarterly basis is impractical since it potentially interrupts cooling water flow from the reactor coolant pumps and thus effects plant reliability.

ZFW-8-1, 2; CV-31116, 117; RS-19-3, 4

These valves are tested to verify they close each cold/refueling shutdown. Testing the valves quarterly is impractical since such testing requires a Plant shutdown.

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DEFERRAL NOTE A (CONT'D)

ZSI-6-1, 2, 3, 4; ZSI-9-3, 4, 5, 6

With the reactor vessel head removed, these check valves are full stroked. Each valve is also verified to close and back leakage measured during refueling shutdown, and plant start-up operations. It is impractical to stroke the valves quarterly or at cold shutdown. Quarterly testing is prevented because system design and cold shutdown testing cannot be performed except when Reactor Vessel Head is removed and the refueling pool is partially flooded in preparation for refueling. These valves will be tested in accordance with the Code as described above.

ZSI-16-4, 5, 6, 7; ZSI-9-1, 2

With the reactor vessel head removed, these check valves are full stroked. Each valve is also verified to close during refueling shutdown and plant start-up operations. The valves are not pressure isolation valves, therefore back leakage is not a Code requirement. It is impractical to stroke valves except at refueling shutdown when the reactor head is removed.

ZVC-8-2; ZVC-17-1

These valves are in piping which provides charging flow to the reactor coolant system. Interrupting flow to test the check valve would require placing excess letdown in service, removing normal charging and impose a thermal cycle on the letdown system nozzles. The valves are tested in accordance with the Code each cold shutdown.

ZVC-8-6, 7

These valves are in piping which provides seal injection flow to the reactor coolant pumps and it's impractical to verify the valves close on cessation of flow since such testing could result in seal failure. Possible foreign material entry and excessive valves manipulations could damage RCP seals. The valves are tested in accordance with the Code each refueling shutdown.

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DEFERRAL NOTE B

Exercising these valves quarterly or at cold shutdown requires removal of safeguards equipment from service and requires excessive system or component manipulation in order to establish the proper test conditions. This coupled with the possibility of errors in restoration of safeguards equipment or the occurrence of an event with abnormal system lineups could result in unsafe operation of the plant which is not warranted for the type of testing to be accomplished. Specifically:

CV-31230, 31279

These valves are in piping which provides let-down flow to the reactor coolant system. Interrupting flow to test these valves would require placing excess letdown in service, removing normal charging and impose a thermal cycle on the letdown/charging system nozzles. Valves will be tested at cold shutdown.

CV-31233, 31234

These valves are stroked open and closed during cool down operation. Stroking these valves with the RCS at pressure causes a loss of one of the pressure boundaries of the reactor coolant system and during this stroking results in a small loss of RCS inventory. Valves will be tested at cold shutdown.

ZHC-1-3, 4, 5, 6

These valves are stroked open and closed each cold shutdown during post-LOCA hydrogen control system valve cycling. Valve cycling requires opening manual valves required by Technical Specification to be closed.

MV-32108, 32109, 32110, 32111

Stroking these valves requires the use of electrical jumpers and closing breakers required by the Technical Specification to be open. MV-32108 and MV-32109 are interlocked with MV-32110 and 32111 to provide a continuous suction for the CS pumps. Testing these valves (which would require a Technical Specifications change) is impractical except at refueling due to the need for excessive manipulation of safety related equipment to perform the testing.

MV-32170, 32172

The valves provide a pressure boundary between RCS and SI. Cycling the valves with RCS at pressure challenges Technical Specification pressure isolation valves. The valves are cycled at cold shutdown.

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DEFERRAL NOTE B (CONT'D)

MV-32204, 32205

Stroking these valves removes the mini flow protection for the SI pumps, and therefore requires removal of both SI pumps from service. The valves are cycled at each cold shutdown.

MV-32178, 32179, 32180, 32181,

These valves will be cycled at refueling shutdown. The valves are the boundary between RHR and containment Sump B. Cycling valves contaminates the Sump.

MV-32190, 191

Stroking these valves results in entering an LCD as required by Technical Specification. Safety function is to close to isolate RWST during SI recirc mode. Other valves with similar functions are locked closed to prevent cycling during normal operation. See MV-32208, 209, below. Valves will be tested at cold shutdown.

MV-32208, 32209

The power supply to these valves is required by Technical Specification to be in the OFF position. Cycling these valves requires turning the power supply to the ON position. To comply with Tech. Specs., valves will be cycled at cold shutdown.

SV-37091, 092, 093, 094, 095, 096

Stroking of these could cause a small loss of coolant accident from the RCS. Therefore, the testing will be done each refueling. The justification for this frequency was included in NSP letter to the NRC dated July 6, 1981, and was agreed to by Lawrence Livermore National Laboratory Technical Evaluation Report (TER) February 23, 1983. The TER was included as enclosure 2 of the NRC SER dated September 19, 1983.

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DEFERRAL NOTE B (CONT'D)

CV-31511, 512, 555, 556

Cycling these valves results in a loss in accumulator nitrogen inventory, or borated water inventory. The valves will be full stroked in accordance with the Code at cold shutdown.



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DEFERRAL NOTE C

The quarterly test of the RHR pumps recirculates the fluid in the RHR loop. The recirc line returns to the suction line down stream of 2SI-7-1(-2) . Because there is no flow path available other than this recirculation, there is no loss of inventory from this loop. This results in no flow from the RWST and makes stroking 2SI-7-1(-2) impractical.

2SI-7-1, 2

Exercising these valves quarterly or at cold shutdown requires transfer of inventory from the RWST to waste or to the RCS and then to waste. The benefits of this exercise is deemed not worth the effort. The valves will be exercised each refueling.

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DEFERRAL NOTE D

Exercising these valves open at cold shutdown requires removal of safeguards equipment from service and excessive system or component manipulation in order to establish the proper test conditions. This coupled with the possibility of errors in the restoration of safeguards equipment or the occurrence of an event with abnormal system line-ups could result in unsafe operation of the plant which is not warranted for the type of testing to be accomplished. Specifically:

25I-10-1, 2

Stroking these valves open at cold shutdown requires opening valves which are closed for protection of the Reactor Coolant System against over-pressurization. Testing valves closed more than once each refueling cycle is impractical. These valves will be tested in accordance with the Code at refueling shutdown.

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DEFERRAL NOTE E

The following valve will not be stroked on a quarterly basis for the following reasons:

ZRH-6-1

Installation of the valve is such that it cannot be exercised open during normal plant operation. Isolation of the valve for exercising requires removal of the letdown line and one loop of the RHR system from service. The close function of the valve is verified on a continuous basis by a high pressure alarm which sounds when back leakage occurs. These valves will be tested in accordance with the Code at Cold Shutdown.

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DEFERRAL NOTE F

The following valve will not be stroked on a quarterly basis for the following reasons:

MV-32122, 123, 268, 269

Exercising these valves during power operation requires establishing an abnormal system lineup. Should inadvertent isolation of the cross connected portions of the system occur (either through operator error in establishing the lineup or from spurious signals from instrumentation in the valve closure circuitry) considerable damage to the reactor coolant pumps and other reactor auxiliary equipment could result. The valves will be stroked each cold shutdown.

CV-31422, 31222

Cycling these excess letdown isolation valves introduces upsets in the operation of charging, seal injection and letdown systems. Possible foreign material entry and system upsets could damage the RCP seals. The valves will be stroked at cold shutdown.

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DEFERRAL NOTE 6

These containment isolation valves are leak rate tested in accordance with 10CFR 50 Appendix J, and are classified TYPE A valves. It is impractical to stroke these valves quarterly for one or more of the following reasons.

- 1). Stroking the valves results in a loss of redundancy and requires logging equipment Out of Service and entering a limiting condition of operation as required by Technical Specification.
- 2). Requires manual operator action in response to design basis accidents. Administrative control over the positioning of the valve is required and unnecessarily disrupts Plant operations.
- 3). Creates operational problems because of the conditions created by the stroking of a normal open/or normal closed valve.

CV-31314, 31315, 31635, 31636

These containment purge supply and exhaust valves are blind flanges out of service during operation. When they are used for containment integrity, the valves are exercised and leak tested prior to being placed in service.

CV-31430, 31347, 31348, 31349

Cycling these containment isolation letdown isolation valves requires removal of RCS charging and letdown, causes thermal cycles on system nozzles, and introduces upsets in the operation of charging, seal injection and letdown systems. Valves will be stroked at cold shutdown.

MV-32114, 116

The CS pump discharge MOV are opened only on "P" signal, HI containment pressure. There is no control switch to open/close this MOV.

Opening the discharge MOV using electrical jumpers with the suction valve open allows borated water to enter the containment spray header. At the conclusion of such a test the water needs to be drained to prevent formation of boric acid crystals in the spray header. This operation requires the opening of a normally closed containment integrity valve. The use of electrical jumpers and excessive valve manipulation and resultant potential for errors make cycling the CS pump discharge MOV on a quarterly basis impractical. In addition, surveillance history shows these MOV's have never failed to operate after some 20 years of testing. These valves will be cycled at cold shutdown.

MV-32210, 32194

Cycling these seal water return containment isolation motor operated valves with RCS at pressure causes the lifting of seal water return safety-relief valve. These valves will be cycled each cold shutdown.

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DEFERRAL NOTE G (CONT'D)

2RC-3-1

Cycling closed this two inch diameter normally closed check valve located inside containment requires adding RMU water to PRT. This is followed by venting and draining of piping and taking administrative control over opening/closing of containment isolation valves. The valve will be cycled each cold shutdown.

2RC-5-1

Cycling this one inch diameter, normally closed, check valve, located inside containment, closed requires adding nitrogen to the PRT followed by venting of piping and taking administrative control over opening/closing of containment isolation valves. The valve will be cycled each cold shutdown.

2VC-8-1; CV-31211; 2VC-7-11

Cycling these valves interrupts charging and letdown flow to/from the Reactor Coolant System, causing thermal cycles in piping nozzles. The valves will be cycled each cold shutdown.

2VC-14-1, 2

Cycling these manual valves at power interrupts seal injection to the operating reactor coolant pumps. The valves will be cycled each cold shutdown.



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DEFERRAL NOTE H

Exercising these valves more frequently than refueling shutdown creates extensive operational problems. Specifically:

CV-31742, CV-31743

Cycling of these valves will isolate all instrument air in containment. This will cause all of the air operated control valves to go to their failed position.

ZVC-8-4, 5

Cycling these check valves at power interrupts seal injection to the operating reactor coolant pumps. The valves will be cycled each refueling shutdown. Foreign material entry and valve manipulations could cause RCP seal damage following testing at cold shutdown.

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DEFERRAL NOTE J

The following valves will not be stroked on a quarterly basis for the following reasons:

2AF-13-1

This valve will be full stroked each cold shutdown. The valve cannot be stroked open quarterly since this would result in thermal shock to the Aux Feedwater lines as they enter the Steam Generator. In addition, quarterly stroking would require cross tying the Aux Feedwater Systems for both units. The valve is tested closed quarterly.

MV-32026, 30

The purpose of these valves is to provide a backup supply of makeup to the steam generators. Normal supply is demineralized water from the condensate storage tanks (Technical Specification lower volume limit of 100,000 gallons) with backup supply from the river.

These valves receive no auto open signal. They are manually opened. Stroking the valves breaks one of the barriers between the demineralized water and the river water and increases potential of river water to steam generator contamination. Valves will be stroked at refueling shutdown.

MV-32028, 32029

These valves are full stroked each cold shutdown. Stroking these valves quarterly is impracticable. It would isolate all Feedwater Flow to an individual Steam Generator

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DEFERRAL NOTE K

Quarterly testing prohibited by Plant Technical Specifications. These valves will not be tested quarterly as they are integral components of systems that are required to be operable during unit operations.

2CA-11-1

This valve will not be tested quarterly as doing so requires isolating CA from both trains of CS, taking CS from service. Furthermore, testing this valve at CSD requires excessive valve manipulation, line evacuation, an external source of pressurization and introduces the possibility of pump cavitation due to the introduction of air into the system. This valve will be tested in accordance with the Code at refueling shutdown.

2CC-14-5, 6; 2CC-18-1, 2; 2CC-61-1, 2

These valves and their associated piping supply CC to the RCP's. The continuous flow is an indication that the valves stroke open. The cessation of flow required to close the valves would require declaring the RCP's out-of-service. These valves are tested in accordance with the Code at cold Shutdown.

2MS-15-1, 2

Will not be tested quarterly as doing so would require a unit shutdown. These valves will be tested in accordance with the Code at cold shutdown.

2RH-3-1, 2

These valves and their associated piping provide suction to the RHR. As the RCC Loop must remain closed above CSD, these check valves cannot be stroked during power operations. At CSD the cessation of flow required to stroke these valves closed would require removing RHR from service. These valves will be tested in accordance with the Code at refueling shutdown.

2SM-10-1

This valve will be tested in accordance with the Code at Refueling Shutdown. This valve is tied directly to the Reactor Coolant Pump Seal Water Return Line and the Volume Control Tank (VCT). Testing of the valve cannot be done quarterly because it requires removal of the seal water return line, and excessive valve manipulation makes it impracticable to test this valve at cold shutdown.

2VC-8-10; 2VC-8-11; 2VC-8-14

These valves will be tested in accordance with the Code at refueling shutdown. Testing these valves requires the removal of the boric acid/reactor make up water blender from service. Excessive valve manipulations and system alignments are needed to conduct the test. The benefits of the exercise are not deemed worth the effort.

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DEFERRAL NOTE K (CONT'D)

2VC-8-3

This valve will be tested in accordance with the Code at cold shutdown. This valve is the boundary valve between auxiliary spray and the RCS Pressurizer. It is located in containment. Full stroke testing the valve quarterly is not practical, and will produce thermal cycles on the pressurizer spray nozzle.

2VC-13-1, 2

These valves will not be tested quarterly. The valve/system manipulations required to install an external pressure source and pressure indication make quarterly testing impractical. The test medium for 2VC-13-1 is hydrogen and Xenon from the VCT. Depressurizing the piping down stream of 2VC-13-1 introduces industrial safety hazards not warranted for the testing to be accomplished. The valve will be tested at refueling shutdown.

The test medium for 2VC-13-2 is charging pump suction fluid. Depressurizing the piping down stream of 2VC-13-2 requires opening two normally closed valves, installing a pressure gauge & venting the normally closed chemical mixing tank. This complex test is not warranted & is considered impractical. This valve will be tested in accordance with the code at cold shutdown.

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DEFERRAL NOTE L

These valves will not be tested quarterly as the system manipulations required outweigh the value of information obtained through testing. For the following reasons:

2CC-23-1

These valves will not be tested quarterly. Doing so would require excessive valve manipulation to install an external pressure source, isolate the excess letdown heat exchanger and drain the heat exchanger and associated piping. Valve stroke indication would then require the addition of pressure instrumentation. This work would be done in containment at power. Because this heat exchanger and its associated piping is out-of-service during normal unit operations and because there is a motor valve providing redundant reverse flow protection, this valve will be tested in accordance with the Code at cold shutdown using non-intrusive diagnostic methods.

CS-46, 47

These valves will not be full stroke tested quarterly or at cold shutdown. Stroking the valve open/closed requires opening the CS pump discharge motor valve and the addition of borated water into the CS piping, taking the CS pump breaker out-of-service, draining CS piping and opening and closing motor operated valves using electrical jumpers. Also, testing these valves requires opening manual containment isolation valves.

These valves are part stroked open quarterly during the running of the CS pump surveillance test and will be full stroked in accordance with the code on a refueling basis. Stroking more frequency is not warranted given the complex nature of the testing.

CS- 48, 49

These valves will not be full stroke tested quarterly or at cold shutdown. Stroking the valve open/closed requires opening the CS pump discharge motor valve and the addition of borated water into the CS piping, taking the CS pump breaker out-of-service, draining CS piping and opening and closing motor operated valves using electrical jumpers. Also, testing these valves requires opening manual containment isolation valves. These valves will be tested at refueling shutdown.

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DEFERRAL NOTE L (CONT'D)

ZHC-2-1, 2

These valves will not be tested quarterly. They are stroked open and closed each cold/refueling shutdown during POST-LOCA Hydrogen Control System valve cycling and 10 CFR50 Appendix J leak testing. Quarterly testing would require entering containment at power, providing an external pressure source and additional pressure indication. The benefit of the additional testing is not significant to warrant the extensive test procedure as these valves are not in service under normal unit operation minimizing the probability of degradation over time between refueling. A motor valve provides redundant reverse flow protection to each check valve. The valves will be tested in accordance with the Code for stroke at cold shutdown and for leak tightness at refueling shutdown.

ZRH-3-3, 4

These valves are partially stroked open quarterly. Testing to provide closure would require entering an LCO by removing a train of RHR from service, connection an external pressure source downstream of the valve, installation of additional pressure indication and entrance into a confined space area. The amount of additional information obtained by adding the closure test to a procedure that already tests the open stroke does not justify the extensive system manipulation required. These valves will be tested in accordance with the Code at cold shutdown.

CV-31383, CV-31384

These valves are controlled by temperature of the CC system. The valves fail safe open on loss of air. The valves are cycled full open on a monthly period to flush the cooling water side of the CC heat exchangers. Failing the valve from the close to open subjects the RCP thermal barrier to a thermal cycle therefore this test requires taking the CC heat exchanger out of service and entering a LCO. The valves are in the I&C PM Program and are serviced, inspected, tested and overhauled on a three year period. Failing the valve open on a quarterly period is not prudent use of resources given the extensive testing and maintenance being performed on these valves and given their maintenance and operating history.



## APPENDIX D IST SECTION XI VALVE NOTES

- NOTE 1. Valves are required to be closed & maintained closed for LO head SI train separation & accident mitigation. Based upon original construction piping downstream of valves is non-safety related.
- NOTE 2. Valve is normally in VCT position, fails to VCT position and is required to be in the closed position for accident conditions. Therefore this valve is a passive valve.
- NOTE 3. Safety related piping and heat exchanger at Prairie Island are designed to withstand the maximum sustained fluid operating pressure, including allowances for pressure surges.
- Relief valves are installed in systems to relieve excess pressures caused by fluid expansion effects during component maintenance to meet B31.1 paragraph 101.4.2 and/or ASME Section VIII Art UG. these valves are exempt from the IST PROGRAM and so footnoted in Tables 1 & 2.
- The relief valves are set such that the maximum sustained fluid operating pressure does not challenge the design pressure rating of the system during all normal and accident scenarios. The exempted valves are serviced, tested and maintained per the Plant PM program using OM-1, 1987 as guidance.
- The excluded valves are deemed to have no specific function in shutting down a reactor or in mitigating the consequences of an accident.
- NOTE 4. The valve outlet flange and bellows of the valve perform the pressure retaining function and this function determines the code designation symbol.
- NOTE 5. CL system manual boundary valves less than 4" in diameter, which are open during normal operation, are not required to be closed for accident mitigation based upon adequate capacity of CL pumps.
- NOTE 6. The Cooling Water Strainer backwash valves were removed from the ASME Section XI IST Program per Evaluation dated 12-27-89.
- NOTE 7. These check valves are capped on inlet and are not required for safe shutdown as accident mitigation. Removal of check valves is planned.

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- NOTE 8. These valves are tested as part of LLRT boundary and are categorized as TEST valves.
- NOTE 9. Valve is isolated during SI actuation.
- NOTE 10. These valves fail open, and are normally open. Failure of valves to close in event of RCP #1 seal failure increases severity of the failure in terms of RCS leakage and requires an expedited shutdown and cooldown.
- NOTE 11. SE 251 determined Charging Pumps and BAST and associated piping and valves as having no safe shutdown or accident mitigation function. The piping and pumps are pressure retaining and used for control only.
- NOTE 12. The SFP cooling is non safety related based upon no accident or safe shutdown function as defined in the USAR. The close function of these check valves is also not safety related since no single active or passive failure will cause loss of the return header.