



Duquesne Light

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March 28, 1983

Director of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Attn: Mr. Steven A. Varga, Chief
Operating Reactors Branch No. 1
Division of Licensing
Washington, DC 20555

Reference: Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
Division of Licensing
Washington, DC 20555

Reference: Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
ISI Pumps and Valves

Dear Mr. Varga:

Enclosed is our report describing the updated Inservice Inspection Program for Beaver Valley Power Station, Unit No. 1 for the next 20-month period starting June 1, 1983.

This update consists only of those pages necessary to update our last report (for the period October 1, 1981, through May 31, 1983).

Very truly yours,

J. J. Carey
Vice President
Nuclear Operations

cc: Mr. W. M. Troskoski, Resident Inspector
U. S. Nuclear Regulatory Commission
Beaver Valley Power Station
Shippingport, PA 15077

U. S. Nuclear Regulatory Commission
c/o Document Management Branch
Washington, DC 20555

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The following pages should be inserted into the BVPS ISI Program updated October 1, 1981 for the next 20 month period (June 1, 1983-January 31, 1985).

The following is a list of the pages to be replaced and the reason for replacement. (Changes are marked with a vertical line in the right margin of the page.)

Page Number	Mark Number	Reason for Change
Table of Contents		Updated
List of Pages		New
<u>PUMP TESTING REQUIREMENTS</u>		
1		Added paragraph K
4		Updated the program period
<u>PUMP TESTING OUTLINES</u>		
4,5	CH-P-2A & B	Removed relief request for bearing temperatures and vibration readings.
6,7	RH-P-1A & B	Added relief request for flow.
12,13	QS-P-4A, B	Added relief request for ΔP & P_i and corrected
14,15	4C, 4D	OST Number.
16,17	RS-P-1A & B	Will run on recirculation during refueling outages starting with the 4th refueling outage.
27	FW-P-3B	Corrected OST Number
50,51	RM-GW-P-109	New Pump
	110	New Pump
52,55	RM-VS-P-109	New Pump
	110,111,112	New Pumps
<u>VALVE TESTING REQUIREMENTS</u>		
1		Updated program period.
4		Added Paragraph J

VALVE TESTING OUTLINES

Page Number	Valve Number	Reason for Change
1	1RC-68	Change OST 1.47.40 to BVT 1.3-1.47.5
	1RC-72	Change OST 1.47.36 to BVT 1.3-1.47.5
	1RC-101	Change ST 1.47.40 to BVT 1.3-1.47.5
	1RC277	Change OST 1.47.79 to BVT 1.3-1.47.5
	1RC278	Change OST 1.47.79 to BVT 1.3-1.47.5
	1RC519	Change OST 1.47.36 to BVT 1.3-1.47.5
	SCV	
2	RC102A-105	New Valves
	PCV	
	RC-455C & D	Added to program - NSR
3	1CH-31	Type-C leakage testing no longer required per Tech. Spec. change-65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
4	1CH75	OST 1.7.3 deleted
	1CH76	OST 1.7.3 deleted
	CH105	OST 1.7.3 deleted Corrected NSA
	CH110	Typo, OST 1.7.3 deleted, corrected NSA
5	CH141	Typo
	CH142	Change OST 1.47.24 to BVT 1.3-1.47.5
6	1CH160	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1CH170	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1CH181	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1CH182	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1CH189	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1CH200A	Change OST 1.47.24 to BVT 1.3-1.47.5
	1CH200B	Change OST 1.47.24 to BVT 1.3-1.47.5
	1CH200C	Change OST 1.47.24 to BVT 1.3-1.47.5
7	1CH204	Change OST 1.47.24 to BVT 1.3-1.47.5
	1CH220	Corrected NSA
	1CH289	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.

VALVE TESTING OUTLINES

Page Number	Valve Number	Reason for Change
	1CH308A	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1CH308B	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1CH308C	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
8	1CH369	Change OST 1.47.18 to BVT 1.3-1.47.5
	1CH378	Change OST 1.47.18 to BVT 1.3-1.47.5
	1CH381	Change OST 1.47.18 to BVT 1.3-1.47.5
9	1DA100A	Change OST 1.47.29 to BVT 1.3-1.47.5
	1DA100B	Change OST 1.47.29 to BVT 1.3-1.47.5
	1DA108A	Change OST 1.47.25 to BVT 1.3-1.47.5
	1DA108B	Change OST 1.47.25 to BVT 1.3-1.47.5
	1DA109A1	Typo should be 1DG109A1 & change OST 1.47.42 to BVT 1.3-1.47.5
	1DA109A2	Typo should be 1DG109A2 & change OST 1.47.42 to BVT 1.3-1.47.5
10	1RH14	Change OST 1.47.20 to BVT 1.3-1.47.5
	1RH15	Change OST 1.47.20 to BVT 1.3-1.47.5
	1RH16	Change OST 1.47.20 to BVT 1.3-1.47.5
	1RH203	Deleted - Vent Valve
	1RH700	Corrected NSA
	1RH701	Corrected NSA
11	1RH720A	Corrected NSA
	1RH720B	Corrected NSA
12	1SI-5	Added reference to OST 1.11.14 per Relief Request
	1SI-6	Added reference to OST 1.11.14 per Relief Request
	1SI-7	Added reference to OST 1.11.14 per Relief Request
	1SI-10	Added reference to OST 1.11.14 per Relief Request
		Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time. Add reference to OST 1.11.16
	1SI-11	Added reference to OST 1.11.14, added reference to OST 1.11.16. Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI-12	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time. Added reference to OST 1.11.16.
	1SI-13	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.

VALVE TESTING OUTLINES

Page Number	Valve Number	Reason for Change
13	1SI-14	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI-23	Added reference to OST 1.11.16
	1SI-24	Added reference to OST 1.11.16
	1SI-25	Added reference to OST 1.11.16
	1SI-26	Added NSA
	1SI-27	Added reference to OST 1.11.14 per Relief Request
	1SI-30	Added NSA
	1SI-41	Added NSA changed OST 1.47.19 to BVT 1.3-1.47.5
	1SI-42	Changed OST 1.47.19 to BVT 1.3-1.47.5
	1SI-83	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
14	1SI-84	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI-91	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI-94	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI-95	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI101-1	Changed OST 1.47.41 to BVT 1.3-1.47.5
15	1SI101-2	Changed OST 1.47.41 to BVT 1.3-1.47.5
	1SI836	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI842	Change OST 1.47.78 to BVT 1.3-1.47.5
16	1SI860A	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI860B	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.

VALVE TESTING OUTLINES

Page Number	Valve Number	Reason for Change
17	1SI867C	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI867D	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI869A	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI869B	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI889	Changed OST 1.47.78 to BVT 1.3-1.47.5
18	1SI890A	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI890B	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SI890C	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
19	1CV-35	Added reference to sealed valve log Changed OST 1.47.49 to BVT 1.3-1.47.5
	1CV-36	Added reference to sealed valve log Changed OST 1.47.50 to BVT 1.3-1.47.5
20	1LM100A1	Changed OST 1.47.43 to BVT 1.3-1.47.5
	1LM100A2	Changed OST 1.47.43 to BVT 1.3-1.47.5
	1LM101A	Changed OST 1.47.49 to BVT 1.3-1.47.5
	1LM101B	Changed OST 1.47.50 to BVT 1.3-1.47.5
	1CV101A	Changed OST 1.47.35 to BVT 1.3-1.47.5
	1CV101B	Changed OST 1.47.35 to BVT 1.3-1.47.5
	1CV102	Changed OST 1.47.34 to BVT 1.3-1.47.5
	1CV102-1	Changed OST 1.47.34 to BVT 1.3-1.47.5
21	1CV150A	Changed OST 1.47.68 to BVT 1.3-1.47.5
	1CV150B	Changed OST 1.47.68 to BVT 1.3-1.47.5
	1CV150C	Changed OST 1.47.67 to BVT 1.3-1.47.5
	1CV150D	Changed OST 1.47.67 to BVT 1.3-1.47.5
	1CV151	Added reference to locked valve log and start-up Procedure A, corrected NSA, change OST 1.47.69 to BVT 1.3-1.47.5
	1CV151-1	Added reference to locked valve log and start-up Procedure A, corrected NSA, changed OST 1.47.69 to BVT 1.3-1.47.5.

VALVE TESTING OUTLINES

Page Number	Valve Number	Reason for Change
22	1QS3	Changed OST 1.47.55 to BVT 1.3-1.47.5
	1QS4	Changed OST 1.47.54 to BVT 1.3-1.47.5
	1QS38	Corrected NSA
	1QS39	Corrected NSA
	1QS40	Corrected NSA
	1QS41	Corrected NSA
23	1QS101A	Changed OST 1.47.55 to BVT 1.3-1.47.5
	1QS101B	Changed OST 1.47.54 to BVT 1.3-1.47.5
24	1RS100	Changed OST 1.47.60 to BVT 1.3-1.47.5
	1RS101	Changed OST 1.47.59 to BVT 1.3-1.47.5
	1RS138	Corrected NSA
	1RS139	Corrected NSA
	1RS141	Corrected NSA
	1RS144	Corrected NSA
25	1RS155A	Type-C Leakage Testing Not Required
	1RS155B	Type-C Leakage Testing Not Required
	1RS156A	Type-C Leakage Testing Not Required
	1RS156B	Type-C Leakage Testing Not Required
26	1SS100A1	Changed OST 1.47.45 to BVT 1.3-1.47.5
	1SS100A2	Changed OST 1.47.45 to BVT 1.3-1.47.5
	1SS102A1	Changed OST 1.47.46 to BVT 1.3-1.47.5
	1SS102A2	Changed OST 1.47.46 to BVT 1.3-1.47.5
	1SS103A1	Changed OST 1.47.72 to BVT 1.3-1.47.5
	1SS103A2	Changed OST 1.47.72 to BVT 1.3-1.47.5
	1SS104A1	Changed OST 1.47.71 to BVT 1.3-1.47.5
	1SS104A2	Changed OST 1.47.71 to BVT 1.3-1.47.5
	1SS105A1	Changed OST 1.47.47 to BVT 1.3-1.47.5
	1SS105A2	Changed OST 1.47.47 to BVT 1.3-1.47.5
	1SS109A1	Changed OST 1.47.42 to BVT 1.3-1.47.5
	1SS109A2	Changed OST 1.47.42 to BVT 1.3-1.47.5
	1SS111A1	Changed OST 1.47.44 to BVT 1.3-1.47.5
	1SS111A2	Changed OST 1.47.44 to BVT 1.3-1.47.5
	1SS112A1	Changed OST 1.47.77 to BVT 1.3-1.47.5
	1SS112A2	Changed OST 1.47.77 to BVT 1.3-1.47.5
27	1SS117A	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SS117B	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1SS117C	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
28	1CC-4	Corrected Reference OST number
	1CC-5	Corrected Reference OST number
	1CC-6	Corrected Reference OST number

VALVE TESTING OUTLINES

Page Number	Valve Number	Reason for Change
	PCV 1CC100	Added Reference to RR 194
	1CC103A	Changed OST 1.47.51 to BVT 1.3-1.47.5
	1CC103A1	Changed OST 1.47.51 to BVT 1.3-1.47.5
	1CC103B	Changed OST 1.47.16 to BVT 1.3-1.47.5
	1CC103B1	Changed OST 1.47.16 to BVT 1.3-1.47.5
	1CC103C	Changed OST 1.47.17 to BVT 1.3-1.47.5
	1CC103C1	Changed OST 1.47.17 to BVT 1.3-1.47.5
29	1CC105D1	Changed OST 1.47.21 to BVT 1.3-1.47.5
	1CC105D2	Changed OST 1.47.21 to BVT 1.3-1.47.5
	1CC105E1	Changed OST 1.47.23 to BVT 1.3-1.47.5
	1CC105E2	Changed OST 1.47.23 to BVT 1.3-1.47.5
	1CC107D1	Changed OST 1.47.10 to BVT 1.3-1.47.5
	1CC107D2	Changed OST 1.47.10 to BVT 1.3-1.47.5
	1CC107E1	Changed OST 1.47.22 to BVT 1.3-1.47.5
	1CC107E2	Changed OST 1.47.22 to BVT 1.3-1.47.5
30	1CC110D	Changed OST 1.47.12 to BVT 1.3-1.47.5
	1CC110E2	Changed OST 1.47.13 to BVT 1.3-1.47.5
	1CC110E3	Changed OST 1.47.13 to BVT 1.3-1.47.5
	1CC110F1	Changed OST 1.47.12 to BVT 1.3-1.47.5
	1CC110F2	Changed OST 1.47.12 to BVT 1.3-1.47.5
	1CC111A1	Changed OST 1.47.15 to BVT 1.3-1.47.5
31	1CC111A2	Changed OST 1.47.15 to BVT 1.3-1.47.5
	1CC111D1	Changed OST 1.47.10 to BVT 1.3-1.47.5
	1CC111D2	Changed OST 1.47.10 to BVT 1.3-1.47.5
	1CC112A2	Changed OST 1.47.5 to BVT 1.3-1.47.5
	1CC112A3	Changed OST 1.47.7 to BVT 1.3-1.47.5
	1CC112B2	Changed OST 1.47.8 to BVT 1.3-1.47.5
32	1CC112B3	Changed OST 1.47.6 to BVT 1.3-1.47.5
36	1CC247	Changed OST 1.47.5 to BVT 1.3-1.47.5
	1CC248	Changed OST 1.47.8 to BVT 1.3-1.47.5
	1CC251	Changed OST 1.47.7 to BVT 1.3-1.47.5
	1CC252	Changed OST 1.47.6 to BVT 1.3-1.47.5
39	1PC-9	Changed OST 1.47.75 to BVT 1.3-1.47.5 & added reference to locked valve log
	1PC-10	Changed OST 1.47.75 to BVT 1.3-1.47.5 & added reference to locked valve log
	1PC-37	Changed OST 1.47.74 to BVT 1.3-1.47.5 & added reference to locked valve log
	1PC-38	Changed OST 1.47.74 to BVT 1.3-1.47.5 & added reference to locked valve log.
	1PC108	Typo
	1PC109	Typo
40	1MS17	Corrected NSA
	1MS101A	Changed testing location
	1MS101B	Changed testing location
41	SV 1MS101C	Changed testing location
	TV 1MS101C	Typo
	1MS104	Valve is not timed
43	1FW33	Added reference that valve tested upon startup from cold shutdown
	1FW34	Added reference that valve tested upon startup from cold shutdown
	1FW35	Added reference that valve tested upon startup from cold shutdown

VALVE TESTING OUTLINES

Page Number	Valve Number	Reason for Change
	1FW42	Added reference that valve tested upon startup from cold shutdown
	1FW43	Added reference that valve tested upon startup from cold shutdown
	1FW44	Added reference that valve tested upon startup from cold shutdown
	1FW53	Added "Position Verification" valves not tested
	1FW54	Added "Position Verification" valves not tested
	1FW55	Added "Position Verification" valves not tested
	1FW56	Delete from program - valve removed
	1FW57	Delete from program - valve removed
44	1FW58	Delete from program - valve removed
	1FW71	Delete from program - now a capped drain valve
45	1FW622	Corrected OST Reference
	1FW623	Corrected OST Reference
	1FW624	Corrected OST Reference
	1FW625	Corrected OST Reference
	1FW626	Corrected OST Reference
46	1FW627	Corrected OST Reference
47	1BD100A	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1BD100B	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1BD100C	Type-C leakage testing no longer required per Tech. Spec. change 65. Leakage test to be determined during R3 outage. Acceptance criteria to be set at this time.
	1BD101A1	New valves
	1BD101A2	New valves
	1BD101B1	New valves
	1BD101B2	New valves
	1BD101C1	New valves
	1BD101C2	New valves
48	1SV100A	Change OST 1.47.64 to BVT 1.3-1.47.5
	1AS278	Change OST 1.47.64 to BVT 1.3-1.47.5
49	1RW59	Typo
	1RW98	Delete "Quarterly Stroke"
	1RW103A	Typo
50	1RW103B	Typo
	1RW103C	Typo
	1RW103D	Typo
	1RW104A	Type-C Leakage Testing Not Required
	1RW104B	Type-C Leakage Testing No. Required & Typo
	1RW104C	Type-C Leakage Testing Not Required
	1RW104D	Type-C Leakage Testing Not Required
	1RW105A	Type-C Leakage Testing Not Required

VALVE TESTING OUTLINES

Page Number	Valve Number	Reason for Change
	1RW105B	Type-C Leakage Testing Not Required
	1RW105C	Type-C Leakage Testing Not Required
	1RW105D	Type-C Leakage Testing Not Required
52	1RW-197	Delete R.R. and added reference to OST
	1RW-198	Delete R.R. and added reference to OST
	1RW-209	Corrected OST number
	1RW-210	Corrected OST number
53A	1RW-108	Delete - valve added in error
	1RW-109	Delete - valve added in error
	1RW-133	Delete - valve added in error
	1RW-134	Delete - valve added in error
	1RW-135	Delete - valve added in error
	1RW-136	Delete - valve added in error
	1RW-158	Delete - valve added in error
	1RW-159	Delete - valve added in error
57	1FP-188	Delete - drain valve
	1FP-209	Deleted - relief valve
59A	1FP-105	New valve
	1FP-106	New valve
	1FP-107	New valve
	1FP-800	New valve
	1FP-804	New valve
	1FP-827	New valve
60	1IA-91-1	Delete valve - not a boundary valve
	1SA-14	Changed OST 1.47.33 to BVT 1.3-1.47.5
	1SA-15	Changed OST 1.47.33 to BVT 1.3-1.47.5
	1IA-90	Changed OST 1.47.38 to BVT 1.3-1.47.5
	1IA-91	Changed OST 1.47.38 to BVT 1.3-1.47.5
61	1DA-100	Deleted reference to OST
	1DA-101	Deleted reference to OST
	1DA-104	Corrected NSA
	1DA-130	Deleted reference to OST
	1LA-131	Deleted reference to OST
	1DA-134	Corrected NSA
	1FO-15	Corrected NSA
	1FO-16	Corrected NSA
	1EE101A	Changed test location
	1EE101B	Changed test location
	1EE101C	Changed test location
	1EE101D	Changed test location
	1EE201	Changed test location
	1EE201A	Changed test location
62	1EE201B	Changed test location
	1EE201C	Changed test location
	1EE202	Changed test location
	1EE202A	Changed test location
	1EE202B	Changed test location
	1EE202C	Changed test location
	1EE203	Changed test location

VALVE TESTING OUTLINES

Page Number	Valve Number	Reason for Change
	1EE203A	Changed test location
	1EE203B	Changed test location
	1EE203C	Changed test location
	1EE204A	Changed test location
	1EE204B	Changed test location
	1EE204C	Changed test location
63	IVS- D-5-3A	Changed OST 1.47.65 to BVT 1.3-1.47.5
	IVS- D-5-3B	Changed OST 1.47.65 to BVT 1.3-1.47.5
	IVS- D-5-5A	Changed OST 1.47.66 to BVT 1.3-1.47.5
	IVS- P-5-5B	Changed OST 1.47.66 to BVT 1.3-1.47.5
	IVS- D-5-6	Changed OST 1.47.66 to BVT 1.3-1.47.5
64	1-HY-101	Changed OST 1.47.68 to BVT 1.3-1.47.5
	1-HY-102	Changed OST 1.47.67 to BVT 1.3-1.47.5
	1-HY-103	Changed OST 1.47.68 to BVT 1.3-1.47.5
	1-HY-104	Changed OST 1.47.67 to BVT 1.3-1.47.5
	1-HY-110	Changed OST 1.47.63 to BVT 1.3-1.47.5
	1-HY-111	Changed OST 1.47.62 to BVT 1.3-1.47.5
	1-HY-119	Changed OST 1.47.63 to BVT 1.3-1.47.5
65	1-HY-120	Changed OST 1.47.62 to BVT 1.3-1.47.5
	1-HY-201A	Added new OST numbers
	1-HY-201B	Added new OST numbers
	1-HY-102A1	New Valves
	1HY-102A2	New Vaives
	1HY-102B1	New Valves
	1HY-102B2	New Valves
	1HY-103A1	New Valves
	1HY-103A2	New Valves
	1HY-103B1	New Valves
66	1HY-103B2	New Valves
	1HY-104A1	New Valves
	1HY-104A2	New Valves
	1HY-104B1	New Valves
	1HY-104B2	New Valves
3	1CH-22,23,24	Typo on OST No.

RELIEF REQUESTS

RR#	Change
16	Delete OST number
17	Delete OST number
18	Delete OST number
19	Delete OST number
24	Change OST to BVT 1.3-1.47.5
27	Change OST to BVT 1.3-1.47.5
28	Change OST to BVT 1.3-1.47.5
29	Change OST to BVT 1.3-1.47.5
54	Change OST to BVT 1.3-1.47.5
55	Change OST to BVT 1.3-1.47.5
64	Delete OST number
76	Delete (Duplicate)
77	Typo
81	Delete OST number
82	Delete OST number
83	Delete OST number
84	Change OST 1.47.49 to BVT 1.3-1.47.5
85	Change OST 1.47.50 to BVT 1.3-1.47.5
88	Typo
119	Change OST 1.47.75 to BVT 1.3-1.47.5
120	Change OST 1.47.75 to BVT 1.3-1.47.5
121	Change OST 1.47.74 to BVT 1.3-1.47.5
122	Change OST 1.47.74 to BVT 1.3-1.47.5
156	Deleted-RW-197 now tested with OST 1.30.2, 3 & 6
157	Deleted-RW-198 now tested with OST 1.30.2, 3 & 6
180	Revised relief request
181	Revised relief request
185	New relief request
186	New relief request
187	New relief request
188	New relief request
189	New relief request
190	New relief request
191	New relief request
192	New relief request
193	New relief request
194	New relief request

LIST OF EFFECTIVE PAGES

- NOTES: 1) *Means that the page has not been changed since the original issue of March 17, 1980.
 2) Pages revised in October of 1981 have the date 10/1/81 on the bottom right corner of the page.
 3) Pages changed for this update have 6/1/83 on the bottom right corner of the page.

<u>Table of Contents</u>	6/1/83	<u>Relief Requests</u>	
		1-12	*
<u>List of Effective Pages</u>	6/1/83	13,14	10/1/81
		15	*
<u>Pump Testing Requirements</u>		16-19	6/1/83
1	6/1/83	20-23	*
2,3	*	24	6/1/83
4	6/1/83	25,26	*
		27,28,29	6/1/83
<u>Pump Testing Outlines</u>		30-53	*
1,2,3	10/1/83	54,55	6/1/83
4,5,6,7	6/1/83	56,57,58	*
8,9,10,11	*	59,60	10/1/81
12-17	6/1/83	61-63	*
18,19	*	64	6/1/83
20,21,22	10/1/81	65-75	*
23-26	*	76,77	6/1/83
27	6/1/83	78-80	*
28-32	10/1/81	81-85	6/1/83
33-49	*	86	*
50-55	6/1/83	87	10/1/81
		88	6/1/83
<u>Valve Testing Requirements</u>		89-118	*
1	6/1/83	119-122	6/1/83
2	*	123,124	*
3	6/1/83	125,126	10/1/83
		125A,B,C,127,128	*
<u>Valve Testing Outlines</u>		129-132	10/1/83
1-32	6/1/83	133-148	*
33	10/1/81	149-155	10/1/83
34,35	*	156,157	6/1/83
36	6/1/83	158-179	*
37	*	180,181	6/1/83
38	10/1/81	182-184	10/1/81
39,40,41	6/1/83	185-194	6/1/83
42	*		
43-50	6/1/83		
42	*		
52	6/1/83		
53	*		
53a	6/1/83		
54,55,56	*		
57	6/1/83		
58,59	*		
59a-66	6/1/83		

Note: Relief has been granted from Type-C testing the following valves by Technical Specification Amendment 65. The Leakage Test to be used will be determined during the third refueling outage. The acceptance criteria will be established at that time.

1CH-31	1SI-451	MOV-1SI-867C
1CH-289	1SI-452	MOV-1SI-867D
1CH-181	1SI-10	1SI-95
1CH-182	1SI-11	MOV-1SI-836
1CH-183	1SI-12	MOV-1SI-860A
MOV-1CH-308A	1SI-13	MOV-1SI-860B
MOV-1CH-308B	1SI-14	1CH-170
MOV-1CH-308C	MOV-1SI-890A	1CH-160
1SI-83	MOV-1SI-890B	TV-1BD-100A
1SI-84	MOV-1SI-890C	TV-1BD-100B
MOV-1SI-869A	1SI-94	TV-1BD-100C
MOV-1SI-869B	1SI-91	TV-1SS-117A
		TV-1SS-117B
		TV-1SS-117C

H. General Valve Outline Format

1. The basic format for the valve outline follows the outline supplied by NRC Docket No. 50-334 - Guidance for Compliance with ISI, and utilizes the following legend throughout.

OST	- Operating Surveillance Test
RR	- Relief Request
NSR	- Non-Safety Related
Q	- Quarterly
LT	- Leak Test
ST	- Setpoint Test
O	- Open
S	- Shut
A	- Automatic
SO	- Sealed Open
SS	- Sealed Shut
ST	- Sealed Throttled
LO	- Locked Open
LS	- Locked Shut
LT	- Locked Throttled
DEM	- Demineralizer
VCT	- Volume Control Tank
MOV	- Motor-Operated Valve
PCV	- Pressure Control Valve
TCV	- Temperature Control Valve
LCV	- Level Control Valve
TV	- Trip Valve
DBA	- Design Base Accident
S(T)	- Valve is shut for Boric Acid tank in service, throttled for Boric Acid tank in standby

I. OST 1.1.10

OST 1.1.10 will be started within 48 hours of entering Mode 5, but not more often than once every 90 days. Attempts will be made to complete this OST prior to entering Mode 4. However, on short outages, completion will not be a Mode 4 hold. The test will resume where left off when next entering Mode 5.

J. Timing of Solenoid Operated Valves

The quick response time of Solenoid Operated Valves, typically less than one second, makes accurate timing of them impractical. Therefore, Solenoid Operated Valves will not be timed. If, however, the indication of valve movement is not immediately visible, the operator will place the valve on monthly frequency and initiate corrective action.

VALVE TESTING REQUIREMENTS

In the following section, the testing requirements of Section XI, 1974 Edition and up through the Summer Addenda 1975 of the ASME Boiler and Pressure Vessel Code Subsections IWB - Inservice Testing of Valves are outline to existing Beaver Valley Power Station, Unit No. 1, Surveillance Tests for safety-related valves. This section consists of Comments on Valve Testing Criteria, Specific Relief Requests and Valve Outlines by numeric system classification for all applicable safety-related valves. The period covered by this program is from June 1, 1983-January 31, 1985.

COMMENTS ON VALVE TESTING CRITERIA

A. Code Testing of Category A and B Valves

1. Safety-related valves classified as Category A and B by Subsection IWB-2110 - Categories of Valves, are tested as required by subsection IWB-2400 - Inservice Test, Category A Category B Valves - of the Code, at least once per three (3) months, with the exception as defined in IWB-3410 (b) (1), (e) and (f). Specific relief requests from code testing for the aforementioned as well as any additional reason(s), are referenced on the valve outline sheet and explained in detail on the applicable Relief Request sheet. (See specific Relief Request section.)

NOTE: Category A valves, in addition, are leak rate tested at a frequency as scheduled refueling outages but not less than once every two years.

B. Code Testing of Category C Valves

1. Safety-related valves classified as Category C, IWB-3510 - Safety Valves or Relief Valves, are setpoint tested in accordance with ASME PTC 25.2-1966 at a frequency as defined in Table IWB-3510-1.
2. Safety-related valves classified as Category C, IWB-3520 - Check Valve Tests are exercised at least once per three (3) months with the exceptions as defined in paragraph IWB-3520(b). Specific relief requests from code testing for the aforementioned as well as any additional reason(s), are referenced on the valve outline sheet and explained in detail on the applicable Relief Request sheet. (See specific Relief Request section.)

C. Code Testing of Category D Valves

1. (There are no explosively actuated valves at Beaver Valley Power Station, Unit No. 1.)

Pump Reactor Building/SICRS Name: Exhaust (SA 9/10) Radiation Monitor Pump		Pump Number: LRM-P-VS112	Code Class: 3	System: 43 Radiation Monitors
Function: Sample flow to radiation monitor				
Parameter	OST	Applicable	Req'd	Relief Request or Comment
N	NA	P CS R	RR	Constant speed induction motor
PI	NA	P CS R	RR	See comment H.2 on Pump Testing Criteria
ΔP	NA	P CS R	RR	Same as above
Q	NA	P CS R	RR	Same as above
V	NA	P CS R	RR	Same as above
Tb	NA	P CS R	RR	Same as above
L	NA	P CS R	RR	Same as above
Remarks:				

Pump Reactor Building/SICRS Exhaust (Spring 4) Name: Radiation Monitor Pump		Pump Number: ILM-P-VS110	Class: 3	System: 43 Radiation Monitors
Function: Sample flow to radiation monitor		Remarks:		
Parameter	OST	Applicable	Req'd	Relief Request or Comment
N	NA	P CS R	RR	Constant speed induction motor
PI	NA	P CS R	RR	See comment H.2 on Pump Testing Criteria
ΔP	NA	P CS R	RR	Same as above
Q	NA	P CS R	RR	Same as above
V	NA	P CS R	RR	Same as above
Tb	NA	P CS R	RR	Same as above
L	NA	P CS R	RR	Same as above

Pump Name: Process Vent (SA 9/10) Radiation Monitor Pump		Pump Number: ILM-P-GW110		Class: 3	System: 43 Radiation Monitors
Function: Sample flow to radiation monitor		Remarks:			
Parameter	OST	Applicable	Req'd	Relief Request or Comment	
N	NA	P CS R	RR	Constant speed induction motor	
PI	NA	P CS R	RR	See comment H.2 on Pump Testing Criteria	
ΔP	NA	P CS R	RR	Same as above	
Q	NA	P CS R	RR	Same as above	
V	NA	P CS R	RR	Same as above	
T _b	NA	P CS R	RR	Same as above	
L	NA	P CS R	RR	Same as above	

Pump Name:	Process Vent (Sping 4) Radiation Monitor Pump	Number: IRM-P-GW109	Class: 3	System: 43 Radiation Monitors
Function:		Remarks:		
Sample flow to radiation monitor.				
Parameter	OST	Applicable	Req'd	Relief Request or Comment
N	NA	P CS R	RR	Constant speed induction motor
PI	NA	P CS R	RR	See comment H.2 on Pump Testing Criteria
ΔP	NA	P CS R	RR	Same as above
Q	NA	P CS R	RR	Same as above
V	NA	P CS R	RR	Same as above
T _b	NA	P CS R	RR	Same as above
L	NA	P CS R	RR	Same as above

Pump Name: 1B Inside Recirculation Spray Pump		Pump Number: RS-P-1B		Class: 2	System: 13 Containment Depressurization
Function: Circulate containment sump water for long term containment depressurization.				Remarks:	

Parameter	OST	Applicable	Req'd	Relief Request or Comment
N	1.13.4	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.
	1.13.7	R	RR	Constant speed squirrel cage induction motor.
PI	1.13.4	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.
AP	1.13.4	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.
Q	1.13.4	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.
V	1.13.4	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.
Tb	1.13.4	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.
L	1.13.4	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.
	1.13.7	R	X	

Pump 1B Inside Recirculation Name: Spray Pump		Pump Number: RS-F-1A		Code Class: 2	System: 13 Containment Depressurization
Function: Circulation containment sump water for long term containment depressurization.				Remarks:	
Parameter	OST	Applicable	Req'd	Relief Request or Comment	
N	1.13.3	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.	
	1.13.7	R	RR	Constant speed squirrel cage induction motor.	
PI	1.13.3	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.	
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.	
AP	1.13.3	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.	
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.	
Q	1.13.3	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.	
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.	
V	1.13.3	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.	
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.	
Th	1.13.3	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.	
	1.13.7	R	X	Starting with the fourth refueling outage, the pump will be run on recirc.	
L	1.13.3	P CS	RR	This pump is run dry for not more than 60 seconds. The pump is stopped when it reaches 100 RPM.	
	1.13.7	R	X		

Pump Name:	Chemical Injection Pumps	Pump Number:	QS-P-4D	Class:	2	System:	13 Containment Depressurization
Function:		Chemical Injection during Containment Depressurization		Remarks:			
Parameter	OST	Applicable	Req'd	Relief Request or Comment			
N	1.13.10B (M)	P	RR	Constant speed induction motor.			
PI	1.13.10B (M)	P	RR	Positive Displacement Pump.			
ΔP	1.13.10B (M)	P	RR	Positive Displacement Pump.			
Q	1.13.10B (M)	P	x	Will check using recirculation line flow instrument.			
V	1.13.10B (M)	P	X				
Tb	1.13.10B (M)	P	X				
L	1.13.10B (M)	P	X				

Pump Name: Chemical Injection Pumps		Number: QS-P-4C		Class: 2		System: 13 Containment Depressurization	
Function: Chemical Injection during Containment Depressurization				Remarks:			
Parameter	OST	Applicable	Req'd	Relief Request or Comment			
N	1.13.10A (M)	P	RR	Constant speed induction motor.			
PI	1.13.10A (M)	P	RR	Positive Displacement Pump.			
ΔP	1.13.10A (M)	P	RR	Positive Displacement Pump.			
Q	1.13.10A (M)	P	X	Will check using recirculation line flow instrument.			
V	1.13.10A (M)	P	X				
Tb	1.13.10A (M)	P	X				
L	1.13.10A (M)	P	X				

Pump Name: Chemical Injection Pumps		Pump Number: QS-P-4B	Class: 2	System: 13 Containment Depressurization
Function: Chemical Injection during containment Depressurization		Remarks:		
Parameter	OST	Applicable	Req'd	Relief Request or Comment
N	1.13.10B (M)	P	RR	Constant Speed induction motor.
PI	1.13.10B (M)	P	RR	Positive Displacement pump.
AP	1.13.10B (M)	P	RR	Positive Displacement Pump
Q	1.13.10R (M)	P	X	Will check using recirculation line flow instrument.
V	1.15.10B (M)	P	X	
Tb	1.13.10B (M)	P	X	
L	1.13.10B (M)	P	X	

Pump Name: Chemical Injection Pumps		Number: QS-P-4A	Code Class: 2	System: 13 Containment Depressurization
Function: Chemical Injection during Containment Depressurization		Remarks:		
Parameter	OST	Applicable	Req'd	Relief Request or Comment
N	1.13.10A (M)	P	RR	Constant Speed induction motor.
PI	1.13.10A (M)	P	RR	Positive Displacement Pump
ΔP	1.13.10A (M)	P	RR	Positive Displacement Pump.
Q	1.13.10A (M)	P	X	Will check using recirculation line flow instrument.
V	1.13.10A (M)	P	X	
Tb	1.13.10A (M)	P	X	
L	1.13.10A (M)	P	X	

Pump Name: 1B Residual Heat Removal Pump		Pump Number: RH-P-1B	Code Class: 2	System: 10 Residual Heat Removal
Function: Long Term Decay Heat Removal				
Remarks:				
Parameter	OST	Applicable	Req'd	Relief Request or Comment
N	1.10.1 (SP)	CS R	RR	Constant speed squirrel cage induction motor.
PI	1.10.1 (SP)	CS R	X	No permanently installed suction pressure gauge, temporary test gauge installed on 1RH-200 for test.
ΔP	1.10.1 (SP)	CS R	X	
Q	1.10.1 (SP)	CS R	RR	Not necessary - will have ΔP and a fixed hydraulic resistance flow path (through the reactor).
V	1.10.1 (SP)	CS R	X	
Tb	1.10.1 (SP)	CS R	X	
L	1.10.1 (SP)	CS R	X	

Pump Name: 1A Residual Heat Removal Pump		Pump Number:	RR-P-1A	Code Class: 2	System: 10 Residual Heat Removal
Function: Long Term Decay Heat Removal					
Remarks:					
Parameter	OST	Applicable	Req'd	Relief Request or Comment	
N	1.10.1 (SP)	CS R	RR	Constant Speed squirrel cage induction motor.	
PI	1.10.1 (SP)	CS R	X	No permanently installed suction pressure gauge, temporary test gauge installed on IRR-200 for test.	
ΔP	1.10.1 (SP)	CS R	X		
Q	1.10.1 (SP)	CS R	RR	Not necessary - will have ΔP and a fixed hydraulic resistance flow path (through the reactor).	
V	1.10.1 (SP)	CS R	X		
Tb	1.10.1 (SP)	CS R	X		
L	1.10.1 (SP)	CS R	X		

Pump Name: 2B Boric Acid Transfer Pump		Pump Number: CH-P-2B	Code Class: 3	System: 7 Chemical and Volume Control
Function:		Remarks:		
Chemical Shim and Emergency Boration Supply				
Parameter	OST	Applicable	Req'd	Relief Request or Comment
N	1.7.2 (W)	P	RR	Constant speed induction motor.
P _i	1.7.2 (W)	P	X	Calculate P _i from the level in the Boric Acid Storage Tank.
ΔP	1.7.2 (W)	P	X	Calculate ΔP from pump discharge pressure and the calculated P _i .
Q	1.7.2 (W)	P	RR	Not necessary; will have ΔP and a fixed hydraulic resistance flow path (recirculation path available for flow back to storage tank).
V	1.7.2 (W)	P	X	
Tb	1.7.2 (W)	P	X	
L	1.7.2 (W)	P	X	

Pump Name: 2A Boric Acid Transfer Pump		Pump Number: CH-P-2A		Code Class: 3	System: 7 Chemical and Volume Control
Function: Chemical Shim and Emergency Boration Supply				Remarks:	
Parameter	OST	Applicable	Req'd	Relief Request or Comment	
N	1.7.1 (W)	P	RR	Constant speed induction motor.	
P_i	1.7.1 (W)	P	X	Calculate P_i from the level in the Boric Acid Storage Tank.	
ΔP	1.7.1 (W)	P	X	Calculate ΔP from pump discharge pressure and the calculated P_i .	
Q	1.7.1 (W)	P	RR	Not necessary; will have ΔP and a fixed hydraulic resistance flow path (recirculation path available for flow back to storage tank).	
V	1.7.1	P	X		
Tb	1.7.1 (W)	P	X		
L	1.7.1 (W)	P	X		

PUMP TESTING REQUIREMENTS

In the following section, the testing requirements of Section XI, 1974 Edition and up through the Summer Addenda 1975 of the ASME Boiler and Pressure Vessel Code subsection IWP-Inservice Testing of Pumps, are outlined to the existing Beaver Valley Power Station, Unit Number One, Operational Surveillance Testing (OST) requirements for safety related pumps. Comments are made, as well as relief requests, which suggest possible exceptions to the Section XI requirements or alternative tests which may be performed to meet the intent of 10 CFR 50.55a. The program covers the period from June 1, 1983 to January 31, 1985.

COMMENTS ON PUMP TESTING CRITERIA

- A. Tests requiring the measurement of pump inlet pressure may have to be performed by calculation of the available static head on the pump. This method becomes necessary on pumps which are not equipped with inlet gages. The method provides good reference conditions to ensure test repeatability, but cannot be used to detect flow blockage on the inlet line, as it assumes that inlet pressure losses are negligible.
- B. When differential pressure (ΔP) or flowrate (Q) are measured in a fixed hydraulic resistance path one must be able to assume that heat exchanger residues can be neglected when a heat exchanger is used as part of the flow path. This is necessary to allow the establishment of good baseline data.
- C. It has been assumed that safety related, commercial air conditioning units can be functionally tested to establish their ability to perform satisfactorily. It is not likely that the performance testing of the air conditioning refrigerant compressors is covered under the intent of Section XI.
- D. Pumps covered under article IWP of Section XI must be of the centrifugal or positive displacement type (from the definition in IWP-2110). For this reason we have excluded air moving and ventilation equipment (fans and blowers), from the Section XI pump testing program at Beaver Valley Power Station, Unit Number One. This type of safety related equipment is operationally tested under the existing OST requirements and need not be subject to any additional testing requirements.
- E. The requirements for measurements of flow rate (Q) in units of GPM (Table IWP-1100.1) indicates that the applicability of article IWP should be limited to fluid pumps only (air flows are usually measured in CFM). For this reason positive displacement air compressors have been excluded from coverage under article IWP of Section XI.

B.V.P.S. - I.S.I.

TABLE OF CONTENTS

Section I	Pump Testing Requirementspp. 1 - 4
Section II	Pump Testing Outline.pp. 1 - 55
Section III	Valve Testing Requirements.pp. 1 - 3
Section IV	Valve Testing Outlines.pp. 1 - 66
Section V	Valve Testing Relief Request.(RR 1 - RR 194)
Section VI	Additional Drawings
	a. 8700-RK-1D, Instrument Air
	b. 10080-RM 247E, Auxilary River Water
	c. Proposed Modification Drawing - Quench Spray Chemical Addition

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1RC44	1					X	T58	LO	RM155A	D-6			Locked or sealed valve log
1RC45	1					X	T58	LO	RM155A	G-6			Locked or sealed valve log
1RC46	1					X	T58	LO	RM155A	B-6			Locked or sealed valve log
1RC50	1					X	T58	LC	RM155A	B-7			Locked or sealed valve log
1RC68	2	X		X			C36		RM155B	E-2	Q	RR1	See Relief Request
											LT		BVT 1.3-1.47.5 - Leak Test
1RC72	2	X		X			C42		RM155B	B-2	Q	RR2	See Relief Request
											LT		BVT 1.3-1.47.5 - Leak Test
1RC101	2	X					TV	O	RM155B	B-1	Q		OST 1.47.3A - Quarterly Stroke and Time
											LT		BVT 1.3-1.47.5 - Leak Test
1RC277	2	X					T58	S	RM155B	C-10	Q	RR3	See Relief Request
											LT		BVT 1.3-1.47.5 - Leak Test
1RC278	2	X					T58	S	RM155B	C-10	Q	RR4	See Relief Request
											LT		BVT 1.3-1.47.5 - Leak Test
1RC455A							PCV	A	RM155B	B-5			NSR-OST 1.1.10-Cold Shutdown stroke and time
1RC455B							PCV	A	RM155B	B-5			NSR-OST 1.1.10-Cold Shutdown stroke and time
1RC456							PCV	A	RM155B	B-9			NSR-OST 1.1.10-Cold Shutdown stroke and time
1RC519	2	X					TV	O	RM155B	B-1	Q		OST 1.47.3A - Quarterly Stroke and Time
											LT		BVT 1.3-1.47.5 - Leak Test

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1RC551A	1			X			RV		RM155B	A-6	ST		Tested by Independent Laboratory
1RC551B	1			X			RV		RM155B	A-7	ST		Tested by Independent Laboratory
1RC551C	1			X			RV		RM155B	A-7	ST		Tested by Independent Laboratory
1RC556A							MOV	S	RM155A	D-2			NSR - OST 1.47.3A
1RC556B							MOV	S	RM155A	F-2			NSR - OST 1.47.3A
1RC556C							MOV	S	RM155A	B-2			NSR - OST 1.47.3A
1RC585							MOV	S	RM155A	D-5			NSR - OST 1.1.10
1RC586							MOV	S	RM155A	F-5			NSR - OST 1.1.10
1RC587							MOV	S	RM155A	B-5			NSR - OST 1.1.10
1RC-455C							PCV	A	RM155B	A-9			NSR - OST 1.1.10
1RC535	1						MOV	O	RM155B	A-9			NSR - OST 1.6.6
1RC536	1						MOV	O	RM155B	B-9			NSR - OST 1.6.6
1RC537	1						MOV	O	RM155B	B-9			NSR - OST 1.6.6
1RC-455D							PCV	A	RM155B	B-9			NSR - OST 1.1.10
1RC-102A	1	X					SOV	LS	RM155B	A-8	Q	RR 185	OST 1.1.10
1RC-102B	1	X					SOV	LS	RM155B	A-8	Q	RR 186	OST 1.1.10
1RC-103A	1	X					SOV	LS	RM155B	A-5	Q	RR 187	OST 1.1.10
1RC-103B	1	X					SOV	LS	RM155B	A-5	Q	RR 188	OST 1.1.10
1RC-104	1	X					SOV	LS	RM155B	B-5	Q	RR 189	OST 1.1.10
1RC-105	1	X					SOV	LS	RM155B	B-5	Q	RR 190	OST 1.1.10

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1CH71							X42D	O	RM159B	E-4			NSR - Operating Manual Ch. 7, Section 3
1CH72							X42D	O	RM159B	E-6			NSR - Operating Manual Ch. 7, Section 3
1CH73							X42D	O	RM159B	G-4			NSR - Operating Manual Ch. 7, Section 3
1CH74							X42D	O	RM159B	G-6			NSR - Operating Manual CH. 7, Section 3
1CH75	3			X			C58B		RM159B	G-4	Q		OST 1.7.1 - Full stroke test
1CH76	3			X			C58B		RM159B	G-5	Q		OST 1.7.2 - Full stroke test
1CH77							X42D	S	RM159B	F-4			NSR - OST 1.7.2
1CH78							X42D	O	RM159B	F-5			NSR - OST 1.7.2
1CH79							X42D	O	RM159B	F-4			NSR - OST 1.7.2
1CH80							X42D	S	RM159B	F-5			NSR - OST 1.7.2
1CH81							X42D	O	RM159B	F-3			NSR - Operating Manual Ch. 7, Section 3
1CH82							X42D	O	RM159B	F-2			NSR - Operating Manual Ch. 7, Section 3
1CH98	3					X	X42D	IS	RM159B	G-4			Locked or sealed valve log
1CH99	3					X	X42D	IS	RM159B	G-5			Locked or sealed valve log
1CH103	2			X			RV		RM159A	A-7	ST		Tested by independent laboratory
1CH105	3		X				HCV	(T)	RM159B	E-5	Q	RR9	OST 1.7.2 - Full stroke test
1CH110	3		X				HCV	(T)	RM159B	E-4	Q	RR10	OST 1.7.1 - Full stroke test
1CH113A							FCV	A	RM159A	E-8			NSR - Ost 1.11.10 weekly exercise
1CH113B							FCV	A	RM159A	D-8			NSR - OST 1.11.10 weekly exercise
1CH114A							FCV	A	RM159A	D-8			NSR - OST 1.1.10 Cold shutdown stroke and time.

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1CH114B							FCV	A	RM159A	C-8			cold shutdown stroke and time
1CH115A							LCV	A	RM159A	C-8			NSR - OST 1.1.10 cold shutdown stroke and time
1CH115B	2		X				MOV	S	RM159A	F-6	Q		OST 1.47.3A - Quarterly stroke and time
1CH115C	2		X				MOV	O	RM159A	D-7	Q	RR11	OST 1.1.10 - cold shutdown stroke and time
1CH115D	2		X				MOV	S	RM159A	F-6	Q		OST 1.47.3A - Quarterly stroke and time
1CH115E	2		X				MOV	O	RM159A	D-7	Q	RR12	OST 1.1.10 - cold shutdown stroke and time
1CH122							FCV	A	RM159A	C-5			NSR - OST 1.11.10 - stroke test
1CH129	3					X	VDB15Y	LS	RM159B	D-4			Locked or sealed valve log
1CH130	3					X	VDB15Y	LS	RM159B	D-6			Locked or sealed valve log
1CH135							X42D	S	RM159A	E-7			NSR - OST 1.1.9
1CH137	2		X				MOV	S	RM159A	C-2	Q	RR182	OST 1.1.10 cold shutdown stroke
1CH138	3					X	X42D	LS	RM159A	F-7			Locked or sealed valve log
1CH141	2			X			C58		RM159A	G-7	Q	RR14	OST 1.11.10 - Full stroke test
1CH142	2	X					MOV	S	RM159A	B-4	Q LT	RR13	OST 1.1.10 - cold shutdown stroke BVT 1.3-1.47.5 - Leak test
1CH143							TCV	DEM	RM159A	A-8			NSR - OST 1.47.3A - Quarterly exercise
1CH145							PCV	A	RM159A	A-7			NSR - OST 1.1.3 & 1.1.4 - 18 month exercise
1CH152							C58		RM159A	F-4			NSR - OST 1.7.5 and 1.7.6
1CH153							C58		RM159A	E-2			NSR - OST 1.7.4 and 1.7.6
1CH154							C58		RM159A	E-4			NSR - OST 1.7.4 and 1.7.5
1CH158	2					X	G58	LO	RM159A	F-2			Locked or lead seal log

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1CH159	2					X	G58	LO	RM159A	E-4			Locked and sealed valve log
1CH160	2	X					FCV	S	RM159A	B-5	Q	RR15	OST 1.1.10-Full stroke test at cold shutdown
1CH161	2					X	G58	LO	RM159A	E-5			Locked or sealed valve log
1CH170	1	X		X			C58		RM159A	B-5	Q	RR19	See Relief Request
1CH181	2	X		X			C58		RM159A	D-2	Q	RR16	See Relief Request
1CH182	2	X		X			C58		RM159A	D-3	Q	RR17	See Relief Request
1CH183	2	X		X			C58		RM159A	D-4	Q	RR18	See Relief Request
1CH186							MOV	T	RM159A	E-2			NSR - OST 1.1.10 - cold shutdown exercise
1CH200A	2	X					TV	S	RM159A	A-4	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
1CH200B	2	X					TV	O	RM159A	A-4	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
1CH200C	2	X					TV	S	RM159A	A-4	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
1CH201							MOV	S	RM159A	C-2			NSR - OST 1.47.3A - Quarterly stroke & time

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1CH203	2			X			RV		RM159A	A-4	ST		Tested per independent laboratory
1CH204	2	X					TV	O	RM159A	B-5	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
1CH209	2			X			RV		RM159A	B-8	ST		Tested per independent laboratory
1CH220	2					X	T58	LS	RM159A	B-2			Locked or sealed log
1CH257	2			X			RV		RM159A	B-7	ST		Tested per independent laboratory
1CH275A	2		X				MOV	O	RM159A	F-3	Q		OST 1.47.3A - Quarterly stroke and time
1CH276B	2		X				MOV	O	RM159A	F-4	Q		OST 1.47.3A - Quarterly stroke and time
1CH275C	2		X				MOV	O	RM159A	F-5	Q		OST 1.47.3A - Quarterly stroke and time
1CH289	2	X					MOV	O	RM159A	B-5	Q		OST 1.47.3A - Quarterly stroke and time
1CH308A	2	X					MOV	O	RM159A	D-2	Q	RR20	OST 1.1.10 - cold shutdown stroke and time
1CH308B	2	X					MOV	O	RM159A	D-3	Q	RR21	OST 1.1.10 - cold shutdown stroke and time
1CH308C	2	X					MOV	O	RM159A	D-4	Q	RR22	OST 1.1.10 - cold shutdown stroke and time
1CH310	1		X				MOV	O	RM159A	A-2	Q		OST 1.47.3A - Quarterly stroke and time
1CH311	1		X				MOV	S	RM159A	A-2	Q	RR23	OST 1.1.10 - cold shutdown stroke and time
1CH350	3		X				MOV	S	RM159A	G-7	Q	RR183	OST 1.1.10 - cold shutdown stroke and time

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Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1RH1							14G54	SO	RM156A	F-3			NSR - Operating Manual Ch. 10, Section 3
1RH2							14G54	SO	RM156A	F-4			NSR - Operating Manual Ch. 10, Section 3
1RH5							14G54	SO	RM156A	E-2			NSR - Operating Manual Ch. 10, Section 3
1RH6							14G54	SO	RM156A	E-4			NSR - Operating Manual Ch. 10, Section 3
1RH7							14G54	SO	RM156A	C-1			NSR - Operating Manual Ch. 10, Section 3
1RH8							14G54	SO	RM156A	C-3			NSR - Operating Manual Ch. 10, Section 3
1RH9							14G54	SO	RM156A	C-2			NSR - Operating Manual Ch. 10, Section 3
1RH10							14G54	SO	RM156A	C-4			NSR - Operating Manual Ch. 10, Section 3
1RH13							2T58	SO	RM156A	C-5			NSR - Operating Manual Ch. 10, Section 3
1RH14	2	X				X	YGW30M	SS	RM156A	D-7	Q	RR27	See Relief Request
											LT		BVT 1.3-1.47.5 - Leak Test
1RH15	2	X				X	YGW15X	SS	RM156A	C-8	Q	RR28	See Relief Request
											LT		BVT 1.3-1.47.5 - Leak Test
1RH16	2	X				X	YBW15Y	SS	RM156A	C-9	Q	RR29	See Relief Request
											LT		BVT 1.3-1.47.5 - Leak Test
1RH214							T58	SO	RM156A	E-2			NSR - Operating Manual Ch. 10, Section 3
1RH605							MOV	A	RM156A	D-2			NSR - Operating Manual Ch. 10, Section 3
1RH700	1		X			X	MOV	S	RM156A	F-6	Q	RR30	See Relief Request
1RH701	1		X			X	MOV	S	RM156A	F-6	Q	RR31	See Relief Request

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1SI1	2			X			C42		RM167A	G-3	Q	RR34	Maint. Pro.-Visual Inspection at Refueling
1SI2	2			X			C42		RM167A	G-5	Q	RR35	Maint. Pro.-Visual Inspection at Refueling
1SI5	2			X			C42		RM167A	F-6	Q	RR36	OST 1.11.14-Full Flow Test at Refueling OST 1.11.1 and 1.11.2-Part stroke
1SI6	2			X			C42		RM167A	F-3	Q	RR37	OST 1.11.14-Full Flow Test at Refueling OST 1.11.1 and 1.11.2-Part stroke
1SI7	2			X			C42		RM167A	F-6	Q	RR38	OST 1.11.14-Full Flow Test at Refueling OST 1.11.1 and 1.11.2-Part stroke
1SI10	1	X		X			C58		RM167B	C-2	Q	RR39	OST 1.11.14-Full Flow Test at Refueling 1.11.16
1SI11	1	X		X			C58		RM167B	B-2	Q	RR40	OST 1.11.14-Full Flow Test at Refueling 1.11.16
1SI12	1	X		X			C58		RM167B	B-2	Q	RR41	OST 1.11.14 - Full Flow Test at Refueling 1.11.16
1SI13	2	X		X			C58		RM167B	C-9	Q	RR42	OST 1.11.14-Full Flow Test at Refueling
1SI14	2	X		X			C58		RM167B	B-9	Q	RR43	OST 1.11.14 - Full Flow Test at Refueling
1SI15	1			X			C58		RM167B	B-2	Q	RR44	OST 1.11.14 - Full Flow Test at Refueling
1SI16	1			X			C58		RM167B	B-2	Q	RR45	OST 1.11.14 - Full Flow Test at Refueling
1SI17	1			X			C58		RM167B	B-2	Q	RR46	OST 1.11.14 - Full Flow Test at Refueling
1SI20	1			X			C58		RM167B	A-1	Q	RR47	OST 1.11.14 - Full Flow Test at Refueling
1SI21	1			X			C58		RM167B	A-1	Q	RR48	OST 1.11.14 - Full Flow Test at Refueling

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
ISI22	1			X			C58		RM167B	A-1	Q	RR49	OST 1.11.14 - Full Flow Test at Refueling
ISI23	1			X			C58		RM167B	B-1	Q	RR50	OST 1.11.14 - Full Flow Test at Refueling
ISI24	1			X			C58		RM167B	B-1	Q	RR51	OST 1.11.14 - Full Flow Test at Refueling
ISI25	1			X			C58		RM167B	B-1	Q	RR52	OST 1.11.14 - Full Flow Test at Refueling
ISI26	2					X	G42	IO	RM167B	E-6			Locked or sealed valve log
ISI27	2			X			C42		RM167B	E-7	Q	RR53	OST 1.11.14-Full Flow Test at Refueling
ISI28	2			X			C58		RM167B	E-3	Q		OST 1.11.2
ISI29	2			X			C58		RM167B	E-2	Q		OST 1.11.1
ISI30	2					X	G42	IO	RM167B	F-6			Locked or sealed valve log
ISI41	2	X				X	T58	LS	RM167B	D-2	Q	RR54	Locked or sealed valve log
											LT		BVT-1.3-1.47.5 - Leak Test
ISI42	2	X		X			C58		RM167B	D-9	Q	RR55	
											LT		BVT-1.3-1.47.5 - Leak Test
ISI-48	1	X		X			C48Z		RM167B	G-3	Q	RR56	OST 1.11.15-Part stroke exercise
											LT		OST 1.11.4 -Leak Test
ISI-49	1	X		X			C48Z		RM167B	F-6	Q	RR57	OST 1.11.15-Part stroke exercise
											LT		OST 1.11.4 -Leak Test
ISI-50	1	X		X			C48Z		RM167B	D-3	Q	RR58	OST 1.11.15-Part stroke exercise
											LT		OST 1.11.4 -Leak Test

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1SI51	1	X		X			C48Z		RM167B	G-2	Q	RR59	OST 1.11.15 - Part stroke exercise
											LT		OST 1.11.4 - Leak Test
1SI52	1	X		X			C48Z		RM167B	F-2	Q	RR60	RHR - Ch. 10, Section 4, Procedure A
											LT		OST 1.11.4 - Leak Test
1SI53	1	X		X			C48Z		RM167B	E-2	Q	RR61	RHR - Ch. 10, Section 4, Procedure A
											LT		OST 1.11.4 - Leak Test
1SI83	1	X		X			C58		TM167B	A-7	Q	RR62	OST 1.11.14 - Full stroke at refueling
1SI84	1	X		X			C58		RM167B	A-7	Q	RR63	OST 1.11.14 - Full stroke at refueling
1SI85	1					X	T58	ST	RM167B	A-4			Locked or sealed valve log
1SI86	1					X	T58	ST	RM167B	B-4			Locked or sealed valve log
1SI87	1					X	T58	ST	RM167B	A-4			Locked or sealed valve log
1SI91	2	X					T58		RM167A	A-6	Q	RR64	OST 1.1.10 -Cold shutdown full exercise
1SI94	2	X		X			C58		RM167B	B-7	Q	RR65	OST 1.11.14 - Full stroke at refueling
1SI95	2	X		X			C58		RM167B	B-7	Q	RR66	OST 1.11.14 - Full stroke at refueling
1SI96	2					X	T58	ST	RM167B	B-7			Locked or sealed valve log

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1SI97	2					X	T58	ST	RM167B	B-4			Locked or sealed log
1SI98	2					X	T58	ST	RM167B	B-4			Locked or sealed log
1SI99	2					X	T58	ST	RM167B	B-4			Locked or sealed log
1SI100	1			X			C58		RM167B	B-2	Q	RR67	OST 1.11.14 - Full stroke at refueling
1SI101	1			X			C58		RM167B	B-2	Q	RR68	OST 1.11.14 - Full stroke at refueling
1SI102	1			X			C58		RM167B	B-2	Q	RR69	OST 1.11.14 - Full stroke at refueling
1SI101-1	2	X					TV	S	RM167B	C-9	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
1SI101-2	2	X					TV	S	RM167B	C-9	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
1SI836	2	X					MOV	S	RM167A	A-2	Q	RR184	OST 1.1.10 - Cold shutdown stroke and time
1SI842	2	X					MOV	S	RM167B	D-9	Q		OST 1.47.3A
											LT		BVT 1.3-1.47.5 - Leak Test
1SI845A	2			X			RV		RM167A	E-3			Tested per Independent Laboratory
1SI845B	2			X			RV		RM167A	E-3			Tested per Independent Laboratory
1SI845C	2			X			RV		RM167A	E-5			Tested per Independent Laboratory
1SI851A							MOV	S	RM167B	F-4			NSR - OST 1.1.10 Refueling stroke
1SI851B							MOV	S	RM167B	E-7			NSR - OST 1.1.10 Refueling stroke
1SI851C							MOV	S	RM167B	D-4			NSR - OST 1.1.10 Refueling stroke

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1SI853A							MOV	S	RM167B	F-3			NSR - OST 1.1.10 - Refueling stroke
1SI853B							MOV	S	RM167B	D-6			NSR - OST 1.1.10 - Refueling stroke
1SI853C							MOV	S	RM167B	C-4			NSR - OST 1.1.10 - Refueling stroke
1SI857	2			X			RV		RM167A	A-4			Tested per Independent Laboratory
1SI858A	2			X			RV		RM167B	F-3			Tested per Independent Laboratory
1SI858B	2			X			RV		RM167B	E-6			Tested per Independent Laboratory
1SI858C	2			X			RV		RM167B	C-3			Tested per Independent Laboratory
1SI860A	2	X					MOV	S	RM167A	G-2	Q	RR70	OST 1.1.10 - Cold shutdown stroke and time
1SI860B	2	X					MOV	S	RM167A	G-5	Q	RR71	OST 1.1.10 - Cold shutdown stroke and time
1SI862A	2		X				MOV	O	RM167A	G-4	Q		OST 1.47.3A - Quarterly stroke and time
1SI862B	2		X				MOV	O	RM167A	G-5	Q		OST 1.47.3A - Quarterly stroke and time
1SI863A	2		X				MOV	S	RM167A	E-4	Q		OST 1.47.3A - Quarterly stroke and time
1SI863B	2		X				MOV	S	RM167A	E-6	Q		OST 1.47.3A - Quarterly stroke and time
1SI864A	2		X				MOV	O	RM167A	E-3	Q		OST 1.47.3A - Quarterly stroke and time
1SI864B	2		X				MOV	O	RM167A	E-3	Q		OST 1.47.3A - Quarterly stroke and time
1SI865A							MOV	O	RM167B	G-3			NSR-CH. 50&51-Startup & shutdown procedures
1SI865B							MOV	O	RM167B	E-6			NSR-CH. 50&51-Startup & shutdown procedures
1SI865C							MOV	O	RM167B	D-3			NSR-CH. 50&51-Startup & shutdown procedures

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1SI867A	2		X				MOV	S	RM167A	C-7	Q	RR72	OST 1.1.10 - Cold shutdown stroke and time
1SI867B	2		X				MOV	S	RM167A	C-7	Q	RR73	OST 1.1.10 - Cold shutdown stroke and time
1SI867C	2	X					MOV	S	RM167A	B-2	Q	RR74	OST 1.1.10 - Cold shutdown stroke and time
1SI867D	2	X					MOV	S	RM167A	B-2	Q	RR75	OST 1.1.10 - Cold shutdown stroke and time
1SI869A	2	X					MOV	S	RM167A	A-2	Q	RR88	OST 1.1.10 - Cold shutdown stroke and time
1SI869B	2	X					MOV	S	RM167A	C-4	Q	RR77	OST 1.1.10 - Cold shutdown stroke and time
1SI884A	2		X				TV	O	RM167A	A-5	Q	RR78	OST 1.1.10 - Cold shutdown stroke and time
1SI884B	2		X				TV	O	RM167A	A-5	Q	RR79	OST 1.1.10 - Cold shutdown stroke and time
1SI884C	2		X				TV	O	RM167A	B-6	Q	RR80	OST 1.1.10 - Cold shutdown stroke and time
1SI885A	2		X				MOV	O	RM167A	E-2	Q		OST 1.47.3A - Quarterly stroke and time
1SI885B	2		X				MOV	O	RM167A	E-3	Q		OST 1.47.3A - Quarterly stroke and time
1SI885C	2		X				MOV	O	RM167A	E-3	Q		OST 1.47.3A - Quarterly stroke and time
1SI885D	2		X				MOV	O	RM167A	E-2	Q		OST 1.47.3A - Quarterly stroke and time
1SI889	2	X					TV	S	RM167A	D-1	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test

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Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1QS1	2					X	VGW15X	LO	RM165A	B-8			Locked or sealed valve log
1QS2	2					X	VGW15X	LO	RM165A	B-8			Locked or sealed valve log
1QS3	2	X		X			WLC1		RM165A	B-5	Q	RR89	OST 1.1.10 - Cold shutdown stroke
											LT		BVT 1.3-1.47.5 - Leak Test
1QS4	2	X		X			WLC2		RM164A	B-5	Q	RR90	OST 1.1.10 - Cold shutdown stroke
											LT		BVT.1.3-1.47.5 - Leak Test
1QS5	2					X	VGW15X	LO	RM165A	B-4			Locked or sealed valve log
1QS6	2					X	VGW15X	LO	RM165A	B-4			Locked or sealed valve log
1QS9	2					X	VBW15Y	LS	RM165A	C-6			Locked or sealed valve log
1QS10	2					X	VBW15Y	LS	RM165A	C-7			Locked or sealed valve log
1QS37							VBS15Y	S	RM165A	D-10			NSR - Operating Manual Ch. 13, Section 3
1QS38							VGW15X	LO	RM165A	C-9			NSR - Operating Manual Ch. 13, Section 3
1QS39							VGW15X	LO	RM165A	C-9			NSR - Operating Manual Ch. 13, Section 3
1QS40							VGW15X	LO	RM165A	C-9			NSR - Operating Manual Ch. 13, Section 3
1QS41							VGW15X	LO	RM165A	C-9			NSR - Operating Manual Ch. 13, Section 3
1QS86							VBS15Y	O	RM165A	D-6			NSR - Operating Manual Ch. 13, Section 3
1QS87							VBS15Y	O	RM165A	D-6			NSR - Operating Manual Ch. 13, Section 3
1QS88							VBS15Y	O	RM165A	D-6			NSR - Operating Manual Ch. 13, Section 3
1QS90							VBS15Y	O	RM165A	D-6			NSR - Operating Manual Ch. 13, Section 3
1QS91							VBS15Y	O	RM165A	D-6			NSR - Operating Manual Ch. 13, Section 3

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1RS-100	2	X		X			WLC-3		RM165A	E-5	Q	RR91	See Relief Request
											LT		BVT 1.3-1.47.5 - Leak Test
1RS-101	2	X		X			WLC-3		RM165A	E-5	Q	RR92	See Relief Request
											LT		BVT 1.3-1.47.5 - Leak Test
1RS-102	2					X	VGW15X	LS	RM165A	F-3			Locked or Sealed Valve Log
1RS-103	2					X	VGW15X	LS	RM165A	F-4			Locked or Sealed Valve Log
1RS-104	2					X	VGW15X	LS	RM165A	F-6			Locked or Sealed Valve Log
1RS-105	2					X	VGW15X	LS	RM165A	F-7			Locked or Sealed Valve Log
1RS-106	2					X	VGW15X	LS	RM165A	F-6			Locked or Sealed Valve Log
1RS-107	2					X	VGW15X	LS	RM165A	F-7			Locked or Sealed Valve Log
1RS-108	2					X	VGW15X	LS	RM165A	E-5			Locked or Sealed Valve Log
1RS-109	2					X	VGW15X	LS	RM165A	E-5			Locked or Sealed Valve Log
1RS-137	2					X	VGS15A	LS	RM165A	E-1			Locked or Sealed Valve Log
1RS-138	2					X	VGS15A	LO	RM165A	E-2			Locked or Sealed Valve Log
1RS-139	2					X	VGS15A	LO	RM165A	E-3			Locked or Sealed Valve Log
1RS-140	2					X	VGS15A	LS	RM165A	E-4			Locked or Sealed Valve Log
1RS-141	2					X	VGS15A	LO	RM165A	E-2			Locked or Sealed Valve Log
1RS-144	2					X	VGS15A	LO	RM165A	E-2			Locked or Sealed Valve Log
1RS-145	3			X					RM165A	G-1	Q		OST 1.13.5 - Monthly test
1RS-146	3			X					RM165A	G-1	Q		OST 1.13.6 - Monthly

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1SS100A1	2	X					TV	0	RM179A	B-4	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1SS100A2	2	X					TV	0	RM179A	B-5	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5--Leak Test
1SS102A1	2	X					TV	0	RM179A	A-4	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5--Leak Test
1SS102A2	2	X					TV	0	RM179A	A-5	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5--Leak Test
1SS103A1	2	X					TV	0	RM179A	C-4	Q		OST 1.47.3A--Quarterly stroke and time
											LT		BVT-1.3-1.47.5--Leak Test
1SS103A2	2	X					TV	0	RM179A	C-5	Q		OST 1.47.3A--Quarterly stroke and time
											LT		BVT-1.3-1.47.5--Leak Test
1SS104A1	2	X					TV	0	RM179A	C-4	Q		OST 1.47.3A--Quarterly stroke and time
											LT		BVT-1.3-1.47.5--Leak Test
1SS104A2	2	X					TV	0	RM179A	C-5	Q		OST 1.47.3A--Quarterly stroke and time
											LT		BVT-1.3-1.47.5--Leak Test
1SS105A1	2	X					TV	0	RM179A	B-4	Q		OST 1.47.3A--Quarterly stroke and time
											LT		BVT-1.3-1.47.5--Leak Test
1SS105A2	2	X					TV	0	RM179A	B-5	Q		OST 1.47.3A--Quarterly stroke and time
											LT		BVT-1.3-1.47.5--Leak Test

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
ISS109A1	2	X					TV	0	RM179A	C-4	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
ISS109A2	2	X					TV	0	RM179A	C-5	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
ISS111A1	2	X					TV	0	RM179A	B-4	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
ISS111A2	2	X					TV	0	RM179A	B-5	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
ISS112A1	2	X					TV	0	RM179A	C-4	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
ISS112A2	2	X					TV	0	RM179A	C-5	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
ISS117A	2	X					TV	0	RM179A	D-1	Q		OST 1.47.3A - Quarterly stroke and time
ISS117B	2	X					TV	0	RM179A	D-1	Q		OST 1.47.3A - Quarterly stroke and time
ISS117C	2	X					TV	0	RM179A	D-1	Q		OST 1.47.3A - Quarterly stroke and time

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Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1CC105A	3		X				TV	0	RM157D	B-3	Q	RR100	OST 1.1.10 - Cold Shutdown stroke and time
1CC105B	3		X				TV	0	RM157D	D-3	Q	RR101	OST 1.1.10 - Cold Shutdown stroke and time
1CC105C	3		X				TV	0	RM157D	F-3	Q	RR102	OST 1.1.10 - Cold Shutdown stroke and time
1CC105D1	2	X					TV	0	RM157D	G-6	Q	RR103	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC105D2	2	X					TV	0	RM157D	G-6	Q	RR104	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC105E1	2	X					TV	0	RM157D	G-5	Q	RR105	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC107E2	2	X					TV	0	RM157D	G-5	Q	RR106	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC107D1	2	X					TV	0	RM157D	G-5	Q	RR107	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC107D2	2	X					TV	0	RM157D	G-5	Q	RR108	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC107E1	2	X					TV	0	RM157D	G-4	Q	RR109	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
1CC107E2	2	X					TV	0	RM157D	G-4	Q	RR110	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Shutdown

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1CC107A	3		X				TV	0	RM157D	C-5	Q	RR111	See Relief Request
1CC107B	3		X				TV	0	RM157D	D-5	Q	RR112	See Relief Request
1CC107C	3		X				TV	0	RM157D	F-5	Q	RR113	See Relief Request
1CC109	3			X			RV	0	RM157B	P-6	ST		Tested per independent laboratory
1CC110	3			X			RV		RM157B	D-6			Tested per independent laboratory
1CC110D	2	X					TV	0	RM129B	G-3	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC110E2	2	X					TV	0	RM129B	A-2	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC110E3	2	X					TV	0	RM129B	A-3	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC110F1	2	X					TV	S	RB129B	G-2	Q	RR114	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.48.5 - Leak Test
1CC110F2	2	X					TV	0	RB129B	G-2	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC111							VCW15A	S	RM157B	A-6			NSR-OST 1.1.9 - Refueling test
1CC111A	3		X				MOV	0	RM157C	B-7	Q		OST 1.47.3A - Quarterly stroke and time
1CC111A	3			X			RV		RM157B	B-5	ST		Tested per independent laboratory
1CC111A1	2	X					TV	0	RM157C	A-9	Q	RR115	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1CC111A2	2	X					TV	0	RM157C	A-9	Q	RR116	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC111B	3		X				MOV	0	RM157C	B-8	Q		OST 1.47.3A - Quarterly stroke and time
1CC111B	3			X			RV		RM157B	B-5	ST		Tested per independent laboratory
1CC111C	3		X				MOV	S	RM157C	B-9			OST 1.47.3A - Quarterly stroke and time
1CC111D1	2	X					TV	0	RM157C	G-8	Q	RR117	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC111D2	2	X					TV	0	RM157C	G-8	Q	RR118	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC112A	3			X			RV		RM129B	B-1	ST		Tested per independent laboratory
1CC112A1	3			X			RV		RM129B	C-1	ST		Tested per independent laboratory
1CC112A2	2	X					MOV	S	RM157D	A-5	Q		OST 1.47.3A - Quarterly stroke and time
													BVT-1.3-1.47.5 - Leak Test
1CC112A2	3			X			RV	S	RM129B	E-1	ST		Tested per independent laboratory
1CC112A3	2	X					MOV		RM151D	G-6	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC112B	3			X			RV		RM129B	B-3	ST		Tested per independent laboratory
1CC112B1	3			X			RV		RM129B	C-3	ST		Tested per independent laboratory
1CC12B2	2	X					MOV	S	RM157D	A-7	Q		OST 1.47.3A-Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1CC112B2	3			X			RV		RM129B	E-3	ST		Tested per independent laboratory
1CC112B3	2	X					MOV	S	RM157D	G-7	Q		OST 1.47.3A - Quarterly stroke and time
											LT		BVT-1.3-1.47.5 - Leak Test
1CC112C	3			X			RV		RM129B	B-5	ST		Tested per independent laboratory
1CC112C1	3			X			RV		RM129B	C-5	ST		Tested per independent laboratory
1CC112C2	3			X			RV		RM129B	E-5	ST		Tested per independent laboratory
1CC113A	3			X			RV		RM157C	B-7	ST		Tested per independent laboratory
1CC113B	3			X			RV		RM157C	B-8	ST		Tested per independent laboratory
1CC113C	3			X			RV		RM157C	B-9	ST		Tested per independent laboratory
1CC115A	3			X			RV		RM157D	B-3	ST		Tested per independent laboratory
1CC115B	3			X			RV		RM157D	D-3	ST		Tested per independent laboratory
1CC115C	3			X			RV		RM157D	E-3	ST		Tested per independent laboratory
1CC116A	3			X			RV		RM157D	C-4	ST		Tested per independent laboratory
1CC116B	3			X			RV		RM157D	D-5	ST		Tested per independent laboratory
1CC116C	3			X			RV		RM157D	F-4	ST		Tested per independent laboratory
1CC117	3			X			RV		RM157D	B-7	ST		Tested per independent laboratory
1CC118	3			X			RV		RM157D	B-7	ST		Tested per independent laboratory
1CC119A	3			X			RV		RM157D	C-5	ST		Tested per independent laboratory
1CC119B	3			X			RV		RM158D	E-7	ST		Tested per independent laboratory
1CC121-1	3		X				TV	O	RM157D	A-1	Q		OST 1.47.3A- Quarterly Stroke and time

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
IMS15	2					X	VGW60A	LO	RM120A	C-2			Locked or sealed valve log
IMS16	2					X	VGW60A	LO	RM120A	D-2			Locked or sealed valve log
IMS17	2					X	VGW60A	LS	RM120A	F-2			Locked or sealed valve log
IMS18	3			X			VCW60A		RM120A	F-5	Q	RR123	OST 1.24.4 - Cold Shutdown/Startup
IMS19	3			X			VCW60A		RM120A	G-5	Q	RR124	OST 1.24.4 - Cold Shutdown/Startup
IMS20	3			X			VCW60A		RM120A	G-5	Q	RR125	OST 1.24.4 - Cold Shutdown/Startup
IMS26							VCW60A	O	RM120A	C-3			NSR - Chapter 21, Section 3
IMS80	2			X			VCW60A		RM120A	C-3	Q	RR125A	Maintenance Visual Check at Refueling
IMS81	2			X			VCW60A		RM120A	D-3	Q	RR125B	Maintenance Visual Check at Refueling
IMS82	2			X			VCW60A		RM120A	E-3	Q	RR125C	Maintenance Visual Check at Refueling
IMS101A	2		X				MOV	S	RM120A	C-3	Q		OST 1.47.3A - Quarterly stroke and time
IMS101A	2		X	X			NRV	O	RM120A	C-3	Q	RR126	OST 1.1.10 - Cold Shutdown stroke and time
IMS101A	2		X				PCV	A	RM120A	C-3	Q	RR127	OST 1.1.10 - Cold Shutdown stroke and time
IMS101A	2			X			SV		RM120A	C-3	ST		Tested on site per maintenance procedure
IMS101A	2		X				TV	O	RM120A	C-3	Q	RR128	OST 1.21.1 - Partial, OST 1.21.4 - Full
IMS101B	2		X				MOV	S	RM120A	D-3	Q		OST 1.47.3A - Quarterly stroke and time
IMS101B	2		X	X			NRV	O	RM120A	D-3	Q	RR129	OST 1.1.10 - Cold Shutdown stroke and time
IMS101B	2		X				PCV	A	RM120A	D-3	Q	RR130	OST 1.1.10 - Cold Shutdown stroke and time
IMS101B	2			X			SV		RM120A	D-3	ST		Tested on site per maintenance procedure
IMS101B	2		X				TV	O	RM120A	D-3	Q	RR131	OST 1.21.2 - Partial - OST 1.21.5 - Full

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
LMS101C	2		X				MOV	S	RM120A	F-3	Q		OST 1.47.3A - Quarterly stroke and time
LMS101C	2		X	X			NRV	Q	RM120A	F-3	Q	RR132	OST 1.1.10 - Cold Shutdown stroke and time
LMS101C	2		X				PCV	A	RM120A	E-3	Q	RR133	OST 1.1.10 - Cold shutdown stroke and time
LMS101C	2			X			SV		RM120A	F-3	ST		Tested onsite per maintenance procedure
LMS101C	2		X				TV	O	RM120A	F-3	Q	RR134	OST 1.21.3 - Partial, OST 1.21.6 - Full
LMS102A	2			X			SV		RM120A	C-3	ST		Tested on site per maintenance procedure
LMS102B	2			X			SV		RM120A	D-3	ST		Tested on site per maintenance procedure
LMS102C	2			X			SV		RM120A	E-3	ST		Tested on site per maintenance procedure
LMS103A	2			X			SV		RM120A	C-2	ST		Tested on site per maintenance procedure
LMS103B	2			X			SV		RM120A	D-2	ST		Tested on site per maintenance procedure
LMS103C	2			X			SV		RM120A	E-2	ST		Tested on site per maintenance procedure
LMS104							HCV	S	RM120A	C-2			NSR - OST 1.1.10 cold shutdown stroke
LMS104A	2			X			SV		RM120A	C-2	ST		Tested on site per maintenance procedure
LMS104B	2			X			SV		RM120A	D-2	ST		Tested on site per maintenance procedure
LMS104C	2			X			SV		RM120A	E-2	ST		Tested on site per maintenance procedure
LMS105A	2			X			SV		RM120A	C-2	ST		Tested on site per maintenance procedure
LMS105B	2			X			SV		RM120A	D-2	ST		Tested on site per maintenance procedure
LMS105C	2			X			SV		RM120A	E-2	ST		Tested on site per maintenance procedure
LMS105A	3		X				TV	S	RM120A	G-5	Q		OST 1.24.4 Alternate Months
LMS105B	3		X				TV	S	RM120A	G-5	Q		OST 1.24.4 Alternate Months

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1FW33	3			X			VCF60A		RM124A	E-5	Q	RR135	OST 1.24.4 - Startup From Cold Shutdown
1FW34	3			X			VCF60A		RM124A	F-3	Q	RR136	OST 1.24.2 - Startup From Cold Shutdown
1FW35	3			X			VCF60A		RM124A	F-4	Q	RR137	OST 1.24.3 - Startup From Cold Shutdown
1FW36	3					X	VCW60A	LO	RM124A	F-2			OST 1.24.4 - Monthly test
1FW37	3					X	VCW60A	LO	RM124A	F-3			OST 1.24.2 - Monthly test
1FW38							VCW60A	S	RM124A	F-4			NSR - OST 1.1.9
1FW39							VCW60A	S	RM124A	F-5			NSR - OST 1.1.9
1FW40							VCW60A	S	RM124A	F-3			NSR - OST 1.1.9
1FW41	3					X	VCW60A	LO	RM124A	F-4			OST 1.24.3 - Monthly
1FW42	2			X			VCW60A		RM124A	B-3	Q	RR138	OST 1.24.2, 3, 4 - Startup From Cold SD
1FW43	2			X			VCW60A		RM124A	C-3	Q	RR139	OST 1.24.2, 3, 4 - Startup from Cold SD
1FW44	2			X			VCW60A		RM124A	F-3	Q	RR140	OST 1.24.2, 3, 4 Startup from Cold SD
1FW50	3			X			VCW60A		RM124A	F-5	Q		OST 1.24.4 - Monthly
1FW51	3			X			VCS60C		RM124A	F-3	Q		OST 1.24.2 - Monthly
1FW52	3			X			VCS60C		RM124A	F-4	Q		OST 1.24.3 - Monthly
1FW53	3					X	VOS60C	LO	RM124A	F-5			OST 1.24.4 - Position Verification
1FW54	3					X	VOS60C	LO	RM124A	F-3			OST 1.24.2 - Position Verification
1FW55	3					X	VOS60C	LO	RM124A	F-4			OST 1.24.3 - Position Verification

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1FW61							VCS60B		RM124A	F-5			NSR - OST 1.24.2, 3, 4 - Monthly Test
1FW65	3					X	VOS60C	LO	RM124A	F-6			OST 1.24.4 - Monthly Test
1FW66	3					X	VOS60C	LO	RM124A	F-3			OST 1.24.2 - Monthly Test
1FW67	3					X	VOS60C	LO	RM124A	F-5			OST 1.24.3 - Monthly Test
1FW68	3			X			VCS60C		RM124A	F-6	Q		OST 1.24.4 - Monthly Test
1FW69	3			X			VCS60C		RM124A	F-3	Q		OST 1.24.2 - Monthly Test
1FW70	3			X			VCS60C		RM124A	F-5	Q		OST 1.24.3 - Monthly Test
1FW151A	2		X				MOV	0	RM124A	E-3	Q		OST 1.24.1 Stroke and Time
1FW151B	2		X				MOV	0	RM124A	D-3	Q		OST 1.24.1 Stroke and Time
1FW151C	2		X				MOV	0	RM124A	D-3	Q		OST 1.24.1 Stroke and Time
1FW151D	2		X				MOV	0	RM124A	D-3	Q		OST 1.24.1 Stroke and Time
1FW151E	2		X				MOV	0	RM124A	B-3	Q		OST 1.24.1 Stroke and Time
1FW151F	2		X				MOV	0	RM124A	B-3	Q		OST 1.24.1 Stroke and Time
1FW156A	2		X				MOV	0	RM124A	B-3	Q	RR141	OST 1.1.10 - Cold Shutdown Stroke and Time
1FW156B	2		X				MOV	0	RM124A	C-3	Q	RR142	OST 1.1.10 - Cold Shutdown Stroke and Time
1FW156C	2		X				MOV	0	RM124A	D-3	Q	RR143	OST 1.1.10 - Cold Shutdown Stroke and Time
1FW158A	2					X		LO	RM124A	B-3			Locked or sealed valve log
1FW158B	2					X		LO	RM124A	C-3			Locked or sealed valve log

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1FW158C	2					X		LO	RM124A	E-3			Locked or sealed valve log
1FW478	2		X				FCV	A	RM124A	B-5	Q	RR144	OST 1.1.10 Cold Shutdown Valve Exercise
1FW479	2		X				FCV	S	RM124A	B-6	Q	RR145	OST 1.1.10 Cold Shutdown Valve Exercise
1FW488	2		X				FCV	A	RM124A	C-5	Q	RR146	OST 1.1.10 Cold Shutdown Valve Exercise
1FW489	2		X				FCV	S	RM124A	C-6	Q	RR147	OST 1.1.10 Cold Shutdown Valve Exercise
1FW498	2		X				FCV	A	RM124A	D-5	Q	RR148	OST 1.1.10 Cold Shutdown Valve Exercise
1FW499	2		X				FCV	S	RM124A	D-6	Q	RR149	OST 1.1.10 Cold Shutdown Valve Exercise
1WT221	3					X		LO	RM124A	E-7			Locked or sealed valve log
1WT222	3					X		LO	RM124A	E-7			Locked or sealed valve log
1WT223	3					X		LO	RM124A	E-7			Locked or sealed valve log
1WT225	3					X		LO	RM124A	G-5			Locked or sealed valve log
1WT226	3					X		LO	RM124A	G-3			Locked or sealed valve log
1WT227	3					X		LO	RM124A	G-4			Locked or sealed valve log
1FW622	2			X			VCW-1500		RM124A	E-3	Q	RP155	OST 1.24.2, 4 - Startup from C/S
1FW623	2			X			VCW-1500		RM124A	E-3	Q	RR154	OST 1.24.3 Startup from C/S
1FW624	2			X			VCW-1500		RM124A	D-3	Q	RR152	OST 1.24.2, 4 - Startup from C/S
1FW625	2			X			VCW-1500		RM124A	D-3	Q	RR153	OST 1.24.3 - Startup from C/S
1FW626	2			X			VCW-1500		RM124A	B-3	Q	RR150	OST 1.24.2, 4 - Startup from C/S

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Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1RW57	3			X			VC115C		RM127B	F-2	Q		OST 1.30.2 - Monthly test
1RW58	3			X			VC115C		RM127B	F-3	Q		OST 1.30.3 - Monthly test
1RW59	3			X			VC115C		RM127B	F-4	Q		OST 1.30.6 - Monthly test
1RW60	3		X			X	WF15A	LS	RM127B	E-4	Q		OST 1.47.3A (Unit 2 Supply)
1RW61							WF15A	S	RM127B	E-2			NSR - OST 1.1.9 - Refueling stroke
1RW98	3		X			X	VBS15C	LS	RM127B	D-3	Q		OST 1.47.3A (Unit 2 Supply)
1RW101A	2			X			RV		RM127B	D-1	ST		Tested per independent laboratory
1RW101B	2			X			RV		RM127B	E-1	ST		Tested per independent laboratory
1RW101C	2			X			RV		RM127B	F-1	ST		Tested per independent laboratory
1RW101D	2			X			RV		RM127B	F-1	ST		Tested per independent laboratory
1RW102A	3			X			RV		RM127B	B-3	ST		Tested per independent laboratory
1RW102A1	3		X				MOV	S	RM127B	F-2	Q		OST 1.47.3A - Quarterly stroke and time
1RW102A2	3		X				MOV	O	RM127B	F-2	Q		OST 1.47.3A - Quarterly stroke and time
1RW102B	3			X			RV		RM127B	B-3	ST		Tested per independent laboratory
1RW102B1	3		X				MOV	S	RM127B	F-3	Q		OST 1.47.3A - Quarterly stroke and time
1RW102B2	3		X				MOV	S	RM127B	F-3	Q		OST 1.47.3A - Quarterly stroke and time
1RW102C	3			X			RV		RM127B	C-3	ST		Tested per independent laboratory
1RW102C1	3		X				MOV	S	RM127B	F-4	Q		OST 1.47.3A - Quarterly stroke and time
1RW102C2	3		X				MOV	S	RM127B	F-4	Q		OST 1.47.3A - Quarterly stroke and time
1RW103A	3		X				MOV	S	RM127A	D-4	Q		OST 1.30.4 - Monthly stroke and time

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1RW103B	3		X				MOV	S	RM127A	D-4	Q		OST 1.30.4 - Monthly stroke and time
1RW103C	3		X				MOV	S	RM127A	F-4	Q		OST 1.30.5 - Monthly stroke and time
1RW103D	3		X				MOV	S	RM127A	F-4	Q		OST 1.30.5 - Monthly stroke and time
1RW104	3		X				MOV	S	RM127A	E-4	Q		OST 1.30.4 - Monthly stroke and time
1RW104A	2	X					MOV	O	RM127A	D-3	Q		OST 1.30.4 - Monthly stroke and time
1RW104B	2	X					MOV	O	RM127A	E-3	Q		OST 1.30.5 - Monthly Stroke and Time
1RW104C	2	X					MOV	O	RM127A	E-3	Q		OST 1.30.4 - Monthly Stroke and Time
1RW104D	2	X					MOV	O	RM127A	F-3	Q		OST 1.30.5 - Monthly Stroke and Time
1RW105A	2	X					MOV	S	RM127A	D-1	Q		*OST 1.30.4 - Monthly Stroke and Time
1RW105B	2	X					MOV	S	RM127A	F-1	Q		*OST 1.30.5 - Monthly Stroke and Time
1RW105C	2	X					MOV	S	RM127A	E-1	Q		*OST 1.30.4 - Monthly Stroke and Time
1RW105D	2	X					MOV	S	RM127A	F-1	Q		*OST 1.30.5 - Monthly Stroke and Time

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1RW115C							PCV	A	RM127B	F-3			NSR - (Functional check through operation)
1RW116	3		X				MOV	S	RM127A	D-4	Q		OST 1.30.4 - Monthly stroke and time
1RW116A	3		X				MOV	A	RM127A	F-8	Q		OST 1.30.1A - Monthly stroke and time
1RW116B	3		X				MOV	A	RM127A	F-8	Q		OST 1.30.1B - Monthly stroke and time
1RW117	3		X				MOV	S	RM127A	D-5	Q		OST 1.30.5 - Monthly stroke and time
1RW118A							PCV	A	RM247	E-2			NSR - (Functional check through operation)
1RW118B							PCV	A	RM247	E-4			NSR - (Functional check through operation)
1RW193	2			X			VCI15C		RM127A	D-3	Q		OST 1.30.2 - Monthly stroke
1RW194	2			X			VCI15C		RM127A	E-3	Q		OST 1.30.3 - Monthly stroke
1RW195	2			X			VCI15C		RM127A	E-3	Q		OST 1.30.2 - Monthly stroke
1RW196	2			X			VCI15C		RM127A	F-3	Q		OST 1.30.3 - Monthly stroke
1RW197	3			X			VCI15C		RM127A	D-1	Q		OST 1.30.2, 3 and 6
1RW198	3			X			VCI15C		RM127A	D-1	Q		OST 1.30.2, 3 and 6
1RW200	3					X	VVI15A	LC	RM127A	A-1			Locked or sealed valve log
1RW206	3					X	VVI15A	LS	RM124A	G-6			OST 1.24.4 - Monthly position check
1RW207	3					X	VVI15A	S	RM124A	G-6			OST 1.24.4 - Monthly position check
1RW208	3					X	VVI15A	S	RM124A	F-5			OST 1.24.4 - Monthly position check
1RW209	3					X	VVI15A	S	RM124A	F-3			OST 1.30.4 - Monthly position check
1RW210	3					X	VVI15A	S	RM124A	F-4			OST 1.30.5 - Monthly position check
1RW220	3		X				VVF15A	S	RM247	C-4	Q		OST 1.30.1A & 1B - Monthly test

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1FP132						X	VGF17A	SO	RB116A	F-5			NSR - Locked or sealed valve log
1FP162						X	VGF17A	SO	RB116A	G-7			NSR - Locked or sealed valve log
1FP164-4						X		SO	RB116A	Detail B			NSR - Locked or sealed valve log
1FP165-4						X		SO	RB116A	Detail B			NSR - Locked or sealed valve log
1FP166-5						X		SO	RB116A	Detail A			NSR - Locked or sealed valve log
1FP167-5						X		SO	RB116A	Detail A			NSR - Locked or sealed valve log
1FP168-5						X		SO	RB116A	Detail A			NSR - Locked or sealed valve log
1FP169-5						X		SO	RB116A	Detail A			NSR - Locked or sealed valve log
1FP170-5						X		SO	RB116A	Detail A			NSR - Locked or sealed valve log
1FP171-4						X		SO	RB116A	Detail B			NSR - Locked or sealed valve log
1FP175						X		SO	RB116A	F-1			NSR - Locked or sealed valve log
1FP194						X	VGF17A	SO	RB116A	G-3			NSR - Locked or sealed valve log
1FP200						X	VGF17A	SO	RV116A	G-3			NSR - Locked or sealed valve log
1FP206						X	VGF17A	SO	RB116A	F-2			NSR - Locked or sealed valve log
1FP213						X		SO	RB116A	G-3			NSR - Locked or sealed valve log
1FP224-5						X		SO	RB116A	Detail A			NSR - Locked or sealed valve log

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
IDA100	3			X			Lunken Heimer		RM151A	A-1	Q		Station logs monitor air pressure
IDA101	3			X			Crane		RM151A	A-5	Q		Station Logs Monitor air pressure
IDA104	3					X	Ball Valve	LS	RM151A	A-3			Locked or sealed valve log
IDA130	3			X			Crane		RM151A	A-6	Q		Station logs monitor air pressure
IDA131	3			X			Crane		RM151A	A-10	Q		Station logs minitor air pressure
IDA134	3					X	Ball Valve	LS	RM151A	A-8			Locked or sealed valve log
1F07	3			X			VCS60B		RM151A	G-4	Q		OST 1.36.1 - Monthly stroke
1F08	3			X			VCS60B		RM151A	G-4	Q		OST 1.36.1 - Monthly stroke
1F09	3			X			VCS60B		RM151A	E-4	Q		OST 1.36.2 - Monthly stroke
1F010	3			X			VCS60B		RM151A	E-4	Q		OST 1.36.2 - Monthly stroke
1F015	3					X	VGS60B	SS	RM151A	F-4			OPERATING MANUAL VALVE LIST - Chapter 36, Section 3
1F016	3					X	VGS60B	SS	RM151A	F-4			OPERATING MANUAL VALVE LIST - Chapter 36 Section 3
1F035	3			X			VCS60B		RM151A	G-2	Q		OST 1.36.1 - Monthly stroke
1F036	3			X			VCS60B		RM151A	F-2	Q		OST 1.36.2 - Monthly stroke
1EE101A	3			X			RV		RM151A	F-4	ST		Tested by Independent Laboratory
1EE101B	3			X			RV		RM151A	F-4	ST		Tested by Independent Laboratory
1EE101C	3			X			RV		RM151A	E-4	ST		Tested by Independent Laboratory
1EE101D	3			X			RV		RM151A	E-4	ST		Tested by Independent Laboratory
1EE201	3			X			RV		RM151A	A-1	ST		Tested by Independent Laboratory
1EE201A	3			X			RV		RM151A	B-1	ST		Tested by Independent Laboratory

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Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
IVS101A	3			X			RV		RM140B	E-3	ST		Tested per independent laboratory
IVS101A	3		X				TV		RM140B	E-3	Q	RR162	OST 1.1.10 - Cold Shutdown stroke and time
IVS101B	3			X			RV		RM140B	D-3	ST		Tested per independent laboratory
IVS101B	3		X				TV		RM140B	D-3	Q	RR163	OST 1.1.10 - Cold Shutdown stroke and time
IVS101C	3			X			RV		RM140B	D-3	ST		Tested per independent laboratory
IVS101C	3		X				TV		RM140B	D-3	Q	RR164	OST 1.1.10 - Cold Shutdown stroke and time
IVS101D	3			X			RV		RM140B	C-3	ST		Tested per independent laboratory
IVS101D	3		X				TV		RM140B	C-3	Q	RR165	OST 1.1.10 - Cold Shutdown stroke and time
IVS101E	3			X			RV		RM140B	C-3	ST		Tested per independent laboratory
IVS101E	3		X				TV		RM140B	C-3	Q	RR166	OST 1.1.10 - Cold Shutdown stroke and time
IVS-D-5-3A	2	X					MOV	S	RB2B		Q	RR167	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
IVS-D-5-3B	2	X					MOV	S	RB2B		Q	RR168	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
IVS-D-5-5A	2	X					MOV	S	RB2B		Q	RR169	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
IVS-P-5-5B	2	X					MOV	S	RB2B		Q	EE170	OST 1.1.10 - Cold Shutdown stroke and time
											LT		BVT 1.3-1.47.5 - Leak Test
IVS-D-5-6	2	X						S	RB2B		Q	RR171	OST 1.1.10 - Cold Shutdown stroke
											LT		BVT 1.3-1.47.5 - Leak Test

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1HY101	2	X				X	VBS15Y	LS	RM150B	C-2	Q	RR172	OST 1.1.10 - Cold Shutdown stroke
											LT		BVT 1.3-1.47.5 - Leak Test
1HY101A	2		X				MOV	S	RM150B	C-4	Q		OST 1.47.3A - Quarterly stroke and time
1HY101B	2		X				MOV	S	RM150B	E-4	Q		OST 1.47.3A - Quarterly stroke and time
1HY102	2	X				X	VBS15Y	LS	RM150B	C-2	Q	RR173	OST 1.1.10 - Cold Shutdown stroke
											LT		BVT 1.3-1.47.5 - Leak Test
1HY102A	2		X				MOV	S	RM150B	C-5	Q		OST 1.47.3A - Quarterly stroke and time
1HY102B	2		X				MOV	S	RM150B	E-5	Q		OST 1.47.3A - Quarterly stroke and time
1HY103	2	X				X	VBS15Y	LS	RM150B	C-2	Q	RR174	OST 1.1.10 - Cold Shutdown stroke
											LT		BVT 1.3-1.47.5 - Leak Test
1HY103A	2		X				MOV	S	RM150B	C-9	Q		OST 1.47.3A - Quarterly stroke and time
1HY103B	2		X				MOV	S	RM150B	E-9	Q		OST 1.47.3A - Quarterly stroke and time
1HY104	2	X				X	VBS15Y	LS	RM150B	E-2	Q	RR175	OST 1.1.10 - Cold Shutdown stroke
											LT		BVT 1.3-1.47.5 - Leak Test
1HY110	2	X				X	VBS15Y	LS	RM150B	D-1	Q	RR176	OST 1.1.10 - Cold Shutdown stroke
											LT		BVT 1.3-1.47.5 - Leak Test
1HY111	2	X				X	VBS15Y	LS	RM150B	F-1	Q	RR177	OST 1.1.10 - Cold Shutdown stroke
											LT		BVT 1.3-1.47.5 - Leak Test
1HY119	2	X		X			VCS15C		RM150B	D-1	Q	RR178	OST 1.1.9 - Refueling stroke
											LT		BVT 1.3-1.47.5 - Leak Test

Valve Mark Number	Class	Valve Category					Type	NSA	Drawing Number	Drawing Coordinates	Test Requirement	Relief Request	Testing and Tracking
		A	B	C	D	E							
1HY120	2	X		X			VCS15C		RM150B	D-1	Q	RR179	OST 1.1.9 - Refueling stroke
											LT		BVT 1.3-1.47.5 - Leak Test
1HY201A	2		X				MOV	A	RM150B	C-5	Q	RR180	OST 1.46.3,6
1HY201B	2		X				MOV	A	RM150B	E-5	Q	RR181	OST 1.46.4,7
1HY102A1	2	X					SOV	S	RM150C	A-3	Q		OST 1.47.3A - Quarterly Stroke & Time
											LT		BVT 1.3-1.47.5 - Leak Test
1HY102A2	2	X					SOV	S	RM150C	A-5	Q		OST 1.47.3A - Quarterly Stroke & Time
											LT		BVT 1.3-1.47.5 - Leak Test
1HY102B1	2	X					SOV	S	RM150C	D-2	Q		OST 1.47.3A - Quarterly Stroke & Time
											LT		BVT 1.3-1.47.5 - Leak Test
1HY102B2	2	X					SOV	S	RM150C	E-5	Q		OST 1.47.3A - Quarterly Stroke & Time
											LT		BVT 1.3-1.47.5 - Leak Test
1HY103A1	2	X					SOV	S	RM150C	B-2	Q		OST 1.47.3A - Quarterly Stroke & Time
											LT		BVT 1.3-1.47.5 - Leak Test
1HY103A2	2	X					SOV	S	RM150C	B-5	Q		OST 1.47.3A - Quarterly Stroke & Time
											LT		BVT 1.3-1.47.5 - Leak Test
1HY103B1	2	X					SOV	S	RM150C	E-2	Q		OST 1.47.3A - Quarterly Stroke & Time
											LT		BVT 1.3-1.47.5 - Leak Test

RELIEF REQUEST 15

Valve No. FCV-1CH-160 Category A Class 2

Function: Reactor Coolant System Fill Header outside containment isolation

Test Requirement: Quarterly stroke and time/refueling leak test

Basis for Relief: This valve is a normally closed passive containment isolation valve and is not required to change position to fulfill its safety function.

Alternate Test: Cold shutdown stroke per OST 1.1.10.

RELIEF REQUEST 16

Valve No. 1CH-181 Category A/C Class 2

Function: Reactor Coolant Seal Injection inside containment isolation check valve.

Test Requirement: Quarterly full stroke.

Basis for Relief: This check valve is normally open during power operation and is required to close to fulfill its intended function. Closure of this valve would stop seal injection flow to the Reactor Coolant Pumps and compromise pump operation.* Therefore, relief from quarterly and cold shutdown full stroke is requested.

*In addition, seal injection flow is required anytime system is pressurized greater than 100 psig.

Alternate Test: Full stroke verified during leak rate testing done at refueling.

RELIEF REQUEST 17Valve No. 1CH-182 Category A/C Class 2

Function: Reactor Coolant Pump seal injection line inside
containment isolation check valve

Test Requirement: Quarterly full stroke exercise/refueling leak test

Basis for Relief: This check valve is normally open during power operation and is required to close to fulfill its safety function. Closure of this valve would stop seal injection and compromise pump operation. In addition, seal injection flow is required anytime the system is pressurized greater than 100 psig. Therefore, relief from quarterly and cold shutdown full stroke exercising is requested.

Alternate Test: Full stroke verified during leak rate testing done at refueling.

RELIEF REQUEST 18Valve No. 1CH-183 Category A/C Class 2

Function: Reactor Coolant Pump seal injection line inside
containment isolation check valve

Test Requirement: Quarterly full stroke exercise/refueling leak test

Basis for Relief: This check valve is normally open during power operation and is required to close to fulfill its safety function. Closure of this valve would stop seal injection and compromise pump operation. In addition, seal injection flow is required anytime the system is pressurized greater than 100 psig. Therefore, relief from quarterly and cold shutdown full stroke exercising is requested.

Alternate Test: Full stroke verified during leak rate testing done at refueling.

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RELIEF REQUEST 19Valve No. 1CH-170 Category A/C Class 1

Function: Reactor Coolant System fill line inside containment
isolation check valve

Test Requirement: Quarterly full stroke/refueling test

Basis for Relief: This check valve is normally closed during power operation and is required to remain closed to fulfill its safety function. Relief from quarterly exercising of this check valve at power is requested because exercising would thermal shock the RCS piping. Also, due to a lack of installed instrumentation, relief is requested from cold shut exercising.

Alternate Test: Full stroke verified at refueling per leak test.

RELIEF REQUEST 20Valve No. MOV-1CH-308A Category A Class 2

Function: Seal water injection line outside containment isolation
for 1RC-P-1A

Test Requirement: Quarterly full stroke and time/refueling leak test

Basis for Relief: This valve is open during power operation but requires to be shut to meet its safety function. Closing this valve during power operation would secure seal injection water to the reactor coolant pump seals resulting in seal damage. Therefore, relief from quarterly stroke exercising and timing is requested.

Alternate Test: Valve to be stroke exercised and timed at each cold shutdown and refueling, when the Reactor Coolant Pumps are secured, per OST 1.1.10.

RELIEF REQUEST 23

Valve No. MOV-1CH-311

Category B

Class 1

Function: Pressurizer alternate spray valve.

Test Requirement: Quarterly full stroke and time.

Basis for Relief: This valve at power operation is shut and is required to be shut to meet its safety function. Opening this valve at power operation would thermally shock the spray nozzles, exceed the 320F ΔT , and cause an uncontrolled pressure transient. Therefore, relief from quarterly stroke exercising and timing is requested.

Alternate Test: This valve will be full stroke exercised and timed at each cold shutdown and refueling per OST 1.1.10.

RELIEF REQUEST 24

Valve No. 1CH-369

Category A/C

Class 2

Function: Penetration 19 pressure relief check around MOV-CH378.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: This valve is normally closed at power operation and requires to remain closed to fulfill its safety function. Since it is a passive valve with no permanently installed instrumentation, relief from quarterly and cold shutdown full stroke exercising is requested.

Alternate Test: Full stroke verified during leak rate testing done at refueling per BVT 1.3 - 1.47.5.

RELIEF REQUEST 27Valve No. 1RH14Category A/EClass E

Function: Inside containment isolation of RHR letdown line to the fuel pool or the RWST.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: This valve is a passive normally shut containment isolation that is not required to change its position to fulfill its safety function. In addition, the valve is administratively controlled with respect to the "as left" position. Therefore, relief is requested from quarterly and cold shutdown exercising.

Alternate Test: Valve stroke verification is completed at refueling per leak test BVT 1.3 - 1.47.5.

RELIEF REQUEST 28Valve No. 1RH15Category A/EClass 2

Function: Outside containment isolation of RHR letdown to the RWST.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: This valve is a passive normally shut containment isolation that is not required to change its position to fulfill its safety function. In addition, the valve is administratively controlled with respect to the "as left" position. Therefore, relief is requested from quarterly and cold shutdown exercising.

Alternate Test: Valve stroke verification is completed at refueling per leak test BVT 1.3 - 1.47.5.

RELIEF REQUEST 29

Valve No. 1RH16 Category A/E Class 2

Function: Inside containment isolation of RHR to RWST or fuel pool system.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: This valve is a passive normally shut containment isolation that is not required to change its position to fulfill its safety function. In addition, the valve is administratively controlled with respect to the "as left" position. Therefore, relief is requested from quarterly and cold shutdown exercising.

Alternate Test: Valve stroke verification is completed at refueling per leak test BVT 1.3 - 1.47.5.

RELIEF REQUEST 30

Valve No. MOV-1RH-700 Category B Class 1

Function: Residual Heat Removal System Inlet Isolation Valve.

Test Requirement: Quarterly stroke and time.

Basis for Relief: Cycling this valve could subject the Residual Heat Removal System to pressure greater than design. This valve is normally closed and de-energized during power operations and required to be closed during an accident condition. Therefore, relief is requested during power operations and cold shutdown.

NOTE: This valve is exercised but not timed each plant cooldown or heatup from cold shutdown per applicable plant startup and shutdown procedures.

Alternate Test: OST 1.10.4 Residual Heat Removal System refueling valve exercise.

RELIEF REQUEST 53

Valve No. 1SI27

Category C

Class 2

Function: To prevent reverse flow from the low head safety injection pumps or VCT.

Test Requirement: Quarterly stroke exercising.

Basis for Relief: Valve is normally closed but is required to open at the onset of the accident to fulfill its safety function. Relief from quarterly full stroke exercising is requested because no flow paths exist but the design path to facilitate the flow. Relief is also requested from cold shutdown exercising due to the generation of additional rad waste from the boratation to verify full flow conditions.

Alternate Test: Part stroke exercising if conducted quarterly per the OST for the charging pump test and full stroke exercising is done per OST 1.11.14 at refueling.

RELIEF REQUEST 54

Valve No. 1SI41

Category A/E

Class 2

Function: Accumulator fill line containment isolation valve.

Test Requirement: Quarterly stroke test/refueling leak test.

Basis for Relief: Relief from quarterly and cold shutdown full or part stroke exercising is requested because this is a manual passive valve and its normal position is closed. Also, its safety related position is closed and testing would be meaningless.

Alternate Test: Refueling leak rate test BVT 1.3 - 1.47.5.

B.V.P.S. - I.S.I.

RELIEF REQUEST 55

Valve No. ISI42 Category A/C Class 2

Function: Inside containment isolation for safety injection accumulator fill line.

Test Requirement: Quarterly full stroke exercise and refueling leak test.

Basis for Relief: This valve is shut during power operation and is required shut to fulfill its safety function which is containment isolation. It is not required to change position at all except when filling S.I. Accumulators. Relief is requested from quarterly and cold shutdown full or part stroke exercising because testing would be meaningless. In addition, no installed instrumentation exists.

Alternate Test: Refueling leak rate testing BVT 1.3-1.47.5

RELIEF REQUEST 56

Valve No. ISI48 Category A/C Class 1

Function: Safety injection accumulator series discharge check valve.

Test Requirement: Quarterly stroke/refueling leak test.

Basis for Relief: This valve at power operation is shut but required to be open for a low pressure accident requiring passive injection for core cooling to fulfill its safety function. Relief from full stroke exercising at any mode of operation and part stroke exercising at power is requested due to high differential pressure, lack of installed instrumentation and an uncontrolled test volume change required to simulate safety analysis flow.

Alternate Test: Valve will be part stroked at extended cold shutdowns per OST 1.11.15 and leak tested per OST 1.11.4.

RELIEF REQUEST 63Valve No. ISI84 Category A/C Class 1

Function: High head safety injection recirculation path to hot legs containment inside isolation check valves

Test Requirement: Quarterly full stroke/refueling leak test

Basis for Relief: The valve is normally shut during power operation but requires to open to fulfill its safety function. Due to the lack of installed instrumentation and relative system pressures, relief from quarterly full or part stroke exercising is requested. In addition, relief from cold shutdown full or partial stroke exercising is requested due to the increased RCS boration required that would necessitate processing a large volume of RCS water. Waste processing could result in increased down time and more generation of rad waste.

Alternate Test: Full flow stroke exercise will be performed at refueling per OST 1.11.14.

RELIEF REQUEST 64Valve No. ISI91 Category A Class 2

Function: Boron injection tank manual bypass and outside containment isolation for (BIT) injection line

Test Requirement: Quarterly full stroke exercise and refueling leak test

Basis for Relief: This is a manual passive valve not required to change position to fulfill its safety function. This valve is shut at power operation and opening fully or partially would thermal shock the cold leg safety injection line nozzles. Therefore, relief is requested from full as well as partial stroke exercising at power.

Alternate Test: Full stroke exercise at cold shutdown and leak test at refueling.

6/1/83

RELIEF REQUEST 75Valve No. MOV-1SI867D Category A Class 2

Function: Boron injection tank (BIT) outlet isolation and outside containment isolation

Test Requirement: Quarterly full stroke/refueling leak check

Basis for Relief: This valve is shut at power but requires to open to fulfill its safety function. Opening this valve at power would require isolating the recirculation system to prevent possible overpressurization of lower pressure piping due to the lack of instrumentation. With isolation of the recirculation system, the possibility of failure to reopen the isolation valves could render the BIT inoperable. Therefore, relief from full or part stroke exercising at power is requested.

Alternate Test: Full stroke exercise at cold shutdowns and leak test at refueling.

RELIEF REQUEST 76

Valve No. _____ Category _____ Class _____

Function:

Test Requirement:

DELETED

Basis for Relief:

Alternate Test:

RELIEF REQUEST 77Valve No. MOV-S1869B Category A Class 2

Function: Charging header BIT bypass to RCS hot legs outside containment isolation

Test Requirement: Quarterly full stroke and time/refueling leak test

Basis for Relief: This valve is shut at power and is not required to change position to fulfill its safety function at the onset of the accident. Only during the simultaneous cold and hot leg recirculation pahse is the valve opened. In addition, thermal stressing of the hot leg injection nozzles would occur. Therefore, relief from full or part stroke exercising of this valve at power is requested.

Alternate Test: Full stroke at cold shutdowns per OST 1.1.10 and leak test at refueling.

RELIEF REQUEST 78Valve No. TV-1SI-884A Category B Class 2

Function: Boron injection tank recirculation tank inlet isolation trip valve.

Test Requirement: Quarterly stroke and time

Basis for Relief: Valves are normally open during power operation for boric acid recirculation. Their safety position is shut and closing this valve with subsequent failure to reopen could degrade the Boron Injection System due to acid solidification. Relief is requested for the above reason during power operation.

Alternate Test: Cold shutdown stroke and time per OST 1.1.10.

RELIEF REQUEST 81

Valve No. MOV-1SI890A

Category A

Class 2

Function: Low head safety injection outside containment isolation valve to the RCS hot legs.

Test Requirement: Quarterly full stroke test.

Basis for Relief: This valve at power is shut and remains shut to fulfill its safety function. Relief from full or partial stroke exercising at power is requested due to the possibility of overpressurizing the LHSI system caused by failure of the upstream check valve and lack of positive pressure indication.

Alternate Test: Full stroke exercising at cold shutdown per OST 1.1.10.

RELIEF REQUEST 82

Valve No. MOV-1SI890B

Category A

Class 2

Function: Low head safety injection outside containment isolation valve to the RCS hot legs.

Test Requirement: Quarterly full stroke test.

Basis for Relief: This valve at power is shut and remains shut to fulfill its safety function. Relief from full or partial stroke exercising at power is requested due to the possibility of overpressurizing the LHSI system caused by failure of the upstream check valve and lack of positive pressure indication.

Alternate Test: Full stroke exercising at cold shutdown per OST 1.1.10.

B.V.P.S. - I.S.I.

RELIEF REQUEST 83

Valve No. MOV-1SI890C

Category A

Class 2

Function: Low head safety injection outside containment isolation to RCS cold legs.

Test Requirement: Quarterly full stroke.

Basis for Relief: This valve is open during plant operation and is required to be open to fulfill its safety function at the onset of the accident. Relief from full or partial stroke exercising of this valve at power is requested because failure of this valve to reopen would render LHSI cold leg injection from both trains inoperable.

Alternate Test: Full stroke at cold shutdown per OST 1.1.10.

RELIEF REQUEST 84

Valve No. 1CV35

Category A/E

Class 2

Function: Outside containment isolation for sealed pressure system.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: This valve is a manual passive valve shut at power and required shut to fulfill its safety function. Relief, therefore, is requested from full or partial stroke exercising at power or cold shutdowns.

Alternate Test: Leak tested per BVT 1.3 - 1.47.5.

B.V.P.S. - I.S.I.

RELIEF REQUEST 85

Valve No. 1CV36

Category A/E

Class 2

Function: Outside containment isolation for sealed pressure system.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: This valve is a manual passive valve shut at power and required shut to fulfill its safety function. Relief, therefore, is requested from full or partial stroke exercising at power or cold shutdowns.

Alternate Test: Leak tested per BVT 1.3 - 1.47.5.

RELIEF REQUEST 86

Valve No. HCV-1CV151

Category A

Class 2

Function: Inside containment isolation for containment vacuum air ejector line.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: This valve is shut at power and is a passive manual valve not required to change its position to fulfill its safety function.

Alternate Test: This valve is exercised each return to power operation from cold shutdown conditions per Startup Procedure A.

6/1/83

B.V.P.S. - I.S.I.

RELIEF REQUEST 87

Valve No. HCV-1CV151 Category A Class 2

Function: Outside containment isolation for containment air ejector line.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: This valve is shut at power and is a passive manual valve not required to change its position to fulfill its safety function.

Alternate Test: This valve is exercised each return to power operation from cold shutdown conditions per Startup Procedure A.

RELIEF REQUEST 88

Valve No. MOV SI869A Category A Class 2

Function: Outside containment isolation from charging header to RCS hot legs.

Test Requirement: Quarterly full stroke.

Basis for Relief: This valve is shut at power and remains shut at the onset of the postulated accident. Cycling this valve at power would thermal shock the RCS hot leg nozzles and compromise system integrity. Therefore, relief from full or partial exercising at power is requested.

Alternate Test: Full stroke exercise at cold shutdowns.

B.V.P.S. - I.S.I.

RELIEF REQUEST 119

Valve No. 1PC-9

Category A/E

Class 2

Function: Fuel pool purification pump suction form reactor cavity inside containment isolation valve.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: Relief is requested from power and cold shutdown full or part stroke testing because this is a normally shut, manual passive containment isolation valve and its safety position is shut.

Alternate Test: Refueling leak test per BVT 1.3 - 1.47.5.

RELIEF REQUEST 120

Valve No. 1PC-10

Category A/E

Class 2

Function: Reactor cavity to fuel pool purification outside containment isolation.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: Relief is requested from power and cold shutdown full or part stroke testing because this is a normally shut, manual passive containment isolation valve and its safety position is shut.

Alternate Test: Refueling leak test per BVT 1.3 - 1.47.5.

B.V.P.S. - I.S.I.

RELIEF REQUEST 121

Valve No. 1PC-37 Category A/E Class 2

Function: Purification system return to reactor cavity outside containment isolation.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: Relief is requested from power and cold shutdown full or part stroke testing because this is a normally shut, manual passive containment isolation valve and its safety position is shut.

Alternate Test: Refueling leak test per BVT 1.3 - 1.47.5.

RELIEF REQUEST 122

Valve No. 1PC-38 Category A/E Class 2

Function: Purification to reactor cavity inside containment isolation.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: Relief is requested from power and cold shutdown full or part stroke testing because this is a normally shut, manual passive containment isolation valve and its safety position is shut.

Alternate Test: Refueling leak test per BVT 1.3 - 1.47.5.

RELIEF REQUEST 155

Valve No. 1FW-622 Category C Class 2

Function: "C" loop auxiliary feedwater redundant header check valve.

Test Requirement: Quarterly full stroke exercise.

Basis for Relief: Relief is requested from full or part stroke testing at power because of the thermal shock of auxiliary feed and main feed interface. Feeding steam generators with cold water would result in large level transients.

Alternate Test: Full stroke test will be done at cold shutdown per OST 1.24.2, 1.24.3, 1.24.4.

RELIEF REQUEST 156

Valve No. Category Class

Function:

Test Requirement:

Basis for Relief:

D E L E T E D

Alternate Test:

B.V.P.S. - I.S.I

RELIEF REQUEST 157

Valve No. _____

Category _____

Class _____

Function:

Test Requirement:

Basis for Relief:

D E L E T E D

Alternate Test:

RELIEF REQUEST 158

Valve No. 1SA-14

Category A/E

Class 2

Function: Station air to containment cross connection outside manual isolation.

Test Requirement: Quarterly full stroke/refueling leak test.

Basis for Relief: This valve is locked shut at power operation and is required to be shut to fulfill its safety function. Relief from quarterly full or partial stroke exercising is requested due to its passive nature.

Alternate Test: Full stroke exercised at cold shutdowns per OST 1.1.10.

B.V.P.S. - I.S.I.

RELIEF REQUEST 179

Valve No. 1HY120

Category A/C

Class 2

Function: "B" H₂ recombiner inside containment isolation check valve.

Test Requirement: Quarterly full stroke exercise and refueling leak test.

Basis for Relief: This check valve is shut at power and is required to remain shut at the onset of the postulate accident to fulfill its safety function. Relief from quarterly and cold shutdown full or part stroke exercising is requested due to inaccessibility of the valves inside containment and the need for extensive rigging to get near the valve.

Alternate Test: Full stroke exercise at refueling per OST 1.1.9.

RELIEF REQUEST 180

Valve No. MOV-1HY201A

Category B

Class 2

Function: "A" H₂ recombiner inlet flow regulator.

Test Requirement: Quarterly full stroke exercise and time.

Basis for Relief: Relief is requested from quarterly full or part stroke testing of this valve because it is an integral part of the Hydrogen Recombiner. As an integral part of the Hydrogen Recombiner it is no more critical than the Hydrogen Recombiner itself. As the Hydrogen Recombiner is only required to be tested every six months, testing of this valve is proposed at six month intervals. This valve cannot be physically observed, but operation is checking by virtue of the valve maintaining a specific flow.

Alternate Test: Exercise check every six months per OST 1.46.3.

B.V.P.S. - I.S.I.

RELIEF REQUEST 181

Valve No. MOV-1HY201B

Category B

Class 2

Function: "B" H₂ recombiner inlet flow regulator.

Test Requirement: Quarterly full stroke exercise and time.

Basis for Relief: Relief is requested from quarterly full or part stroke testing of this valve because it is an integral part of the Hydrogen Recombiner. As an integral part of the Hydrogen Recombiner it is no more critical than the Hydrogen Recombiner itself. As the Hydrogen Recombiner is only required to be tested every six months, testing of this valve is proposed at six month intervals. This valve cannot be physically observed, but operation is checked by virtue of the valve maintaining a specific flow.

Alternate Test: Exercise check every six months per OST 1.46.4.

RELIEF REQUEST 182

Valve No. MOV-CH-137

Category B

Class 2

Function: Excess letdown control valve.

Test Requirement: Quarterly stroke and time.

Basis for Relief: This valve is located inside containment with no position indication in the control room. Also, the position is controlled by a potentiometer and timing the valve would not provide any useful information. Relief is requested from timing this valve and quarterly stroking.

Alternate Test: This valve will be full stroked at each cold shutdown per OST 1.1.10.

RELIEF REQUEST 185

Valve No. SOV-1RC-102A Category A Class 1

Function: RCVS reactor vessel vent.

Test Requirement: Quarterly full stroke exercise and time.

Basis for Relief: This valve is closed during normal operation and was designed to vent the RCS in an emergency. Relief from quarterly testing is requested as a valve failure coupled with a second failure or leakage while stroking this valve would vent the RCS to either the containment ambient or to the PRT.

Alternate Test: Cold shutdown stroke time per OST 1.1.10.

RELIEF REQUEST 186

Valve No. SOV-1RC-102B Category A Class 1

Function: RCVS reactor vessel vent.

Test Requirement: Quarterly full stroke exercise and time..

Basis for Relief: This valve is closed during normal operation and was designed to vent the RCS in an emergency. Relief from quarterly testing is requested as a valve failure coupled with a second failure or leakage while stroking this valve during power operation would vent the RCS to the containment.

Alternate Test: Cold shutdown stroke per OST 1.1.10.

B.V.P.S. - I.S.I.

RELIEF REQUEST 187

Valve No. SOV-1RC-103A Category A Class 1

Function: RCVS pressurized vent.

Test Requirement: Quarterly full stroke exercise and time.

Basis for Relief: This valve is closed during normal operation and was designed to vent the RCS in an emergency. Relief from quarterly testing is requested as a valve failure coupled with a second failure or leakage while stroking this valve during power operation would vent the RCS to the containment.

Alternate Test: Cold shutdown stroke per OST 1.1.10.

RELIEF REQUEST 188

Valve No. SOV-1RC-103B Category A Class 1

Function: RCVS pressurizer vent.

Test Requirement: Quarterly full stroke exercise and time.

Basis for Relief: This valve is closed during normal operation and was designed to vent the RCS in an emergency. Relief from quarterly testing as requested as a valve failure coupled with a second failure or leakage while stroking this valve during power operation would vent the RCS to the containment.

Alternate Test: Cold shutdown stroke per OST 1.1.10.

B.V.P.S. - I.S.I.

RELIEF REQUEST 189

Valve No. SOV-1RC-104 Category A Class 1

Function: RCVS vent to PRT isolation.

Test Requirement: Quarterly full stroke exercise and time.

Basis for Relief: This valve is closed during normal operation and was designed to vent the RCS in an emergency. Relief from quarterly testing is requested as a valve failure coupled with a second failure or leakage while stroking this valve during power operation would vent the RCS to the containment.

Alternate Test: Cold shutdown stroke per OST 1.1.10.

RELIEF REQUEST 190

Valve No. SOV-1RC-105 Category A Class 1

Function: RCVS vent to containment isolation.

Test Requirement: Quarterly full stroke exercise and time.

Basis for Relief: This valve is closed during normal operation and was designed to vent the RCS in an emergency. Relief from quarterly testing is requested as a valve failure coupled with a second failure or leakage while stroking this valve during power operation would vent the RCS to the containment.

Alternate Test: Cold shutdown stroke per OST 1.1.10.

B.V.P.S. - I.S.I.

RELIEF REQUEST 191

Valve No. FP-800

Category C

Class 3

Function: Fire protection, deluge system to RHR area, weighted check valve.

Test Requirement: Quarterly full stroke.

Basis for Relief: This valve is normally shut at power, it is required to remain closed in the event of containment isolation. It only opens in the event that fire protection water is needed in the RHR area. As this valve is located inside the sub-atmospheric containment, and being dry pipe, relief is requested from quarterly full or part stroke exercising.

Alternate Test: Full stroke exercise at cold shutdowns per OST 1.1.10.

RELIEF REQUEST 192

Valve No. FP-804

Category C

Class 3

Function: Fire protection, deluge system to cable penetration area. Weighted check valve.

Test Requirement: Quarterly full stroke.

Basis for Relief: This valve is normally shut at power and is required to remain closed in the event of containment isolation. It only opens in the event that fire protection water is needed in the RHR area. As this valve is located inside the sub-atmospheric containment, and being dry pipe, relief from quarterly full or part stroke exercising is requested.

Alternate Test: Full stroke exercise at cold shutdowns per OST 1.1.10.

B.V.P.S. - I.S.I.

RELIEF REQUEST 193

Valve No. 1FP-827 Category C Class 3

Function: Fire protection, deluge system to containment hose reels, weighted check valve.

Test Requirement: Quarterly full stroke.

Basis for Relief: This valve is normally shut at power and is required to remain closed in the event of containment isolation. It only opens in the event that fire protection water is needed for the containment hose reel stations. As this valve is located inside the sub-atmospheric containment and being, dry pipe, relief is requested from quarterly full or part stroke exercising.

Alternate Test: Full stroke exercise at cold shutdowns per OST 1.1.10.

RELIEF REQUEST 194

Valve No. PCV-1CC-100 Category B Class 3

Function: Reactor plant component cooling water pressure control.

Test Requirement: Quarterly full stroke and time.

Basis for Relief: This valve is used for pressure control in the CCR system. There is no indication in the control room of full open or full closed. Only the demand position. Proper operation is verified by system pressure being maintained. Relief from full stroke testing and timing is therefore requested.

Alternate Test: Monthly exercise as part of OST 1.15.1, 1.15.2, 1.15.3.