System: CAD Post-Accident Sampling System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
FSO-109-75A-1	G-191165	2	B	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD Sample Torus Inboard Isolation Valve	D-17		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-75A-2	G-191165	2	B	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD Sample Torus Outboard Isolation Valve	D-17		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-75A-3	G-191165	2	B	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD Supply Torus Inboard Isolation Valve	D-17		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-75A-4	G-191165	2	B	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD Supply Torus Outboard Isolation Valve	D-17		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-75B-1	G-191165	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD Sample Lower Drywell Inboard Isolation Valve	D-16		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-75B-2	G-191165	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD Sample Lower Drywell Outboard Isolation Valve	D-16		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-75C-1	G-191165	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD Sample Mid Drywell Inboard Isolation Valve	C-15		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: CAD Post-Accident Sampling System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
FSO-109-75C-2	G-191165	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD Sample Mid Drywell Outboard Isolation Valve	C-15		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-75D-1	G-191165	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD Sample Upper Drywell Inboard Isolation Valve	B-15		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-75D-2	G-191165	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD Sample Upper Drywell Outboard Isolation Valve	B-15		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-76A	G-191165	2	A	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD CAM Return To Supp. Chamber Inbd Containment Isolation Valve	F-19		Active	Solenoid					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FSO-109-76B	G-191165	2	A	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD CAM Return To Supp. Chamber Outbd Containment Isolation Valve	G-19		Active	Solenoid					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
NG-11A	VY-E-75-002	2	A	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD N2 Supply Outbd Containment Isolation Valve	H-9		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: CAD Containment Atmosphere Dilution System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
NG-11B	VY-E-75-002	2	A	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD N2 Supply Inbd Containment Isolation Valve	H-8		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
NG-12A	VY-E-75-002	2	A	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD N2 Supply To Supp. Chamber Inbd Containment Isolation Valve	J-9		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
NG-12B	VY-E-75-002	2	A	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD N2 Supply To Supp. Chamber Inbd Containment Isolation Valve	J-8		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
NG-13A	VY-E-75-002	2	A	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD N2 Supply Drywell Inbd Containment Isolation Valve	I-9		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
NG-13B	VY-E-75-002	2	A	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD N2 Supply Drywell Inbd Containment Isolation Valve	H-9		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: CAD Containment Atmosphere Dilution System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
PSV-NG-34A	VY-E-75-002	2	C	SRV	0.50	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Pressure Relief Valve	B-3		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
PSV-NG-34B	VY-E-75-002	2	C	SRV	0.50	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Pressure Relief Valve	G-3		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
VG-23	G-191165	2	A	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD Rad Monitor Supply Outbd Containment Isolation Valve	G-16		Active	Solenoid					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
VG-24	VY-E-75-002	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD H2O2 Analyzer Return Isolation Valve	L-11		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
VG-25	VY-E-75-002	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD H2O2 Analyzer Return Isolation Valve	L-11		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
VG-26	G-191165	2	A	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD Rad Monitor Supply Inbd Containment Isolation Valve	G-15		Active	Solenoid					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: CAD Containment Atmosphere Dilution System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
VG-33	VY-E-75-002	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD H2O2 Analyzer Return Isolation Valve	L-11		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
VG-34	VY-E-75-002	2	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
CAD H2O2 Analyzer Return Isolation Valve	L-11		Active	Solenoid					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
VG-9A	VY-E-75-002	2	A	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD From DW To SBGT System Inbd Containment Isolation Valve	H-12		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
VG-9B	VY-E-75-002	2	A	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
CAD From Supp. Chamber To SBGT System Inbd Containment Isolation Valve	I-14		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: CRD Control Rod Drive Hydraulic System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
CV-3-126	G-191170	2	B	Globe	1.00	C	O	O	FST-Q	ROJ-V04	FST-RO	
Control Rod Drive Scram	C-16		Active	Air					PIT-2Y	n/a	PIT-2Y	
Valve (Typical of 89)									ST-Q	ROJ-V04	STO-RO	7
CV-3-127	G-191170	2	B	Globe	0.75	C	O	O	FST-Q	ROJ-V04	FST-RO	
Control Rod Drive Scram	C-18		Active	Air					PIT-2Y	n/a	PIT-2Y	
Valve (Typical of 89)									ST-Q	ROJ-V04	STO-RO	7
LCV-3-33A	G-191170	2	A	Ball	2.00	O	C	C	FST-Q	n/a	FST-Q	
Scram Discharge Volume	D-7		Active	Air					LT-2Y	n/a	LT-2Y	
Drain Level Control Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
LCV-3-33B	G-191170	2	A	Ball	2.00	O	C	C	FST-Q	n/a	FST-Q	
Scram Discharge Volume	D-3		Active	Air					LT-2Y	n/a	LT-2Y	
Drain Level Control Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
LCV-3-33C	G-191170	2	A	Ball	2.00	O	C	C	FST-Q	n/a	FST-Q	
Scram Discharge Volume	D-8		Active	Air					LT-2Y	n/a	LT-2Y	
Drain Level Control Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
LCV-3-33D	G-191170	2	A	Ball	2.00	O	C	C	FST-Q	n/a	FST-Q	
Scram Discharge Volume	D-3		Active	Air					LT-2Y	n/a	LT-2Y	
Drain Level Control Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
PCV-3-32A	G-191170	2	A	Ball	1.00	O	C	C	FST-Q	n/a	FST-Q	
Scram Discharge Volume	A-9		Active	Air					LT-2Y	n/a	LT-2Y	
Vent Pressure Control Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	

System: CRD Control Rod Drive Hydraulic System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
PCV-3-32B	G-191170	2	A	Ball	1.00	O	C	C	FST-Q	n/a	FST-Q	
Scram Discharge Volume Vent Pressure Control Valve	A-1		Active	Air					LT-2Y	n/a	LT-2Y	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SO-3-120	G-191170	2	B	Gate	0.50	C	C	C	FST-Q	ROJ-V04	FST-RO	
CRD Manual Control Exhaust Valve (Typical of 89)	D-17		Active	Solenoid					ST-Q	ROJ-V04	STC-RO	
SO-3-121	G-191170	2	B	Gate	0.50	C	C	C	FST-Q	ROJ-V04	FST-RO	
CRD Manual Control Exhaust Valve (Typical of 89)	D-18		Active	Solenoid					ST-Q	ROJ-V04	STC-RO	
SO-3-122	G-191170	2	B	Gate	0.50	C	C	C	FST-Q	ROJ-V04	FST-RO	
CRD Manual Control Withdrawal Valve (Typical of 89)	C-18		Active	Solenoid					ST-Q	ROJ-V04	STC-RO	
SO-3-123	G-191170	2	B	Gate	0.50	C	C	C	FST-Q	ROJ-V04	FST-RO	
CRD Manual Control Insertion Valve (Typical of 89)	C-17		Active	Solenoid					ST-Q	ROJ-V04	STC-RO	
V3-114	G-191170	2	C	Check	0.75	DE	O/C	n/a	FE-Q	ROJ-V04	SC-RO	
Scram Exhaust To Discharge Volume Check (Typical of 89)	C-18		Active	Self					FE-Q	ROJ-V04	SO-RO	8
V3-115	G-191170	2	A/C	Check	0.50	DE	C	n/a	LT-2Y	ROJ-V04	LT-RO	
CRD Charging Water To Accumulator Check (Typical of 89)	B-16		Active	Self					PSO-Q	ROJ-V04	PSO-RO	
									FE-Q	ROJ-V04	SC-RO	9
V3-137	G-191170	2	C	Check	0.50	DE	C	n/a	PSO-Q	ROJ-V04	PSO-RO	
Drive Water Supply Check Valve (Typical of 89)	B-17		Active	Self					FE-Q	ROJ-V04	SC-RO	

System: CRD Control Rod Drive Hydraulic System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V3-138	G-191170	2	C	Check	0.50	DE	C	n/a	PSO-Q	n/a	PSO-Q	
CRD Cooling Water Supply Check Valve (Typical of 89)	B-16		Active	Self					FE-Q	n/a	SC-Q	2
V3-162A	G-191170	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
Scram Discharge Volume Vent Check Valve	A-9		Active	Self					PSO-Q	ROJ-V08	PSO-RO	
									FE-Q	ROJ-V08	SC-RO	
V3-162B	G-191170	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
Scram Discharge Volume Vent Check Valve	A-1		Active	Self					PSO-Q	ROJ-V08	PSO-RO	
									FE-Q	ROJ-V08	SC-RO	
V3-412A	G-191170	2	A/C	Check	0.75	DE	C	n/a	LJ	n/a	LJ-RO	
Recirculation Pump Seal Purge Supply Check Valve	E-12		Active	Self					PSO-Q	ROJ-V05	PSO-Q	
									FE-Q	ROJ-V05	SC-RO	
V3-412B	G-191170	2	A/C	Check	0.75	DE	C	n/a	LJ	n/a	LJ-RO	
Recirculation Pump Seal Purge Supply Check Valve	E-12		Active	Self					PSO-Q	ROJ-V05	PSO-RO	
									FE-Q	ROJ-V05	SC-RO	
V3-413A	G-191170	2	A/C	Check	0.75	DE	C	n/a	LJ	n/a	LJ-RO	
Recirculation Pump Seal Purge Supply Check Valve	E-12		Active	Self					PSO-Q	ROJ-V05	PSO-RO	
									FE-Q	ROJ-V05	SC-RO	
V3-413B	G-191170	2	A/C	Check	0.75	DE	C	n/a	LJ	n/a	LJ-RO	
Recirculation Pump Seal Purge Supply Check Valve	E-12		Active	Self					PSO-Q	ROJ-V05	PSO-RO	
									FE-Q	ROJ-V05	SC-RO	

System: CS Core Spray System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SL-14-31A	G-191168	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Core Spray Inst. Excess Flow Check Valve	F-7		Active	Self								
SL-14-31B	G-191168	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Core Spray Inst. Excess Flow Check Valve	E-7		Active	Self								
SR-14-20A	G-191168	2	C	SRV	1.50	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Core Spray Pump Discharge Relief Valve	F-11		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-14-20B	G-191168	2	C	SRV	1.50	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Core Spray Pump Discharge Relief Valve	D-12		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
V14-10A	G-191168	2	C	Check	10.00	DE	O/C	n/a	FE-Q	ROJ-V19	PSO-Q	
Core Spray Pump Discharge Check Valve	I-11		Active	Self					FE-Q	n/a	SC-Q	
									FE-Q	ROJ-V19	SO-RO	
V14-10B	G-191168	2	C	Check	10.00	DE	O/C	n/a	FE-Q	ROJ-V19	PSO-Q	
Core Spray Pump Discharge Check Valve	I-14		Active	Self					FE-Q	n/a	SC-Q	
									FE-Q	ROJ-V19	SO-RO	
V14-11A	G-191168	2	B	Gate	8.00	O	O	As-Is	PIT-2Y	n/a	PIT-2Y	
Core Spray Injection Valve	G-9		Active	Motor, AC					ST-Q	n/a	STO-Q	
V14-11B	G-191168	2	B	Gate	8.00	O	O	As-Is	PIT-2Y	n/a	PIT-2Y	
Core Spray Injection Valve	C-9		Active	Motor, AC					ST-Q	n/a	STO-Q	
V14-12A	G-191168	1	A	Gate	8.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
Core Spray Injection Isolation Valve	G-8		Active	Motor, AC					LT-2Y	n/a	LT-2Y	10
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: CS Core Spray System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V14-12B	G-191168	1	A	Gate	8.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
Core Spray Injection Isolation Valve	C-8		Active	Motor, AC					LT-2Y	n/a	LT-2Y	10
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V14-13A	G-191168	1	A/C	Check	8.00	DE	O/C	n/a	LT-2Y	n/a	LT-2Y	10
Core Spray Injection Check Valve	F-6		Active	Self					FE-Q	ROJ-V19	SC-RO	
									FE-Q	ROJ-V19	SO-RO	
V14-13B	G-191168	1	A/C	Check	8.00	DE	O/C	n/a	LT-2Y	n/a	LT-2Y	10
Core Spray Injection Check Valve	D-6		Active	Self					FE-Q	ROJ-V19	SC-RO	
									FE-Q	ROJ-V19	SO-RO	
V14-14A	G-191168	1	B	Gate	8.00	L.O.	O	n/a	PIT-2Y	n/a	PIT-2Y	
Core Spray Injection Line Valve	F-5		Passive	Manual								
V14-14B	G-191168	1	B	Gate	8.00	L.O.	O	n/a	PIT-2Y	n/a	PIT-2Y	
Core Spray Injection Line Valve	E-5		Passive	Manual								
V14-22A	G-191168	2	C	Check	2.00	DE	C	n/a	PSO-Q	RR-V01	PSO-OC	
Condensate Transfer Flush Check Valve	I-9		Active	Self					FE-Q	RR-V01	SC-OC	14
V14-22B	G-191168	2	C	Check	2.00	DE	C	n/a	PSO-Q	RR-V01	PSO-OC	
Condensate Transfer Flush Check Valve	B-10		Active	Self					FE-Q	RR-V01	SC-OC	14
V14-23A	G-191168	2	C	Check	2.00	DE	C	n/a	PSO-Q	RR-V01	PSO-OC	
Condensate Transfer Flush Check Valve	I-9		Active	Self					FE-Q	RR-V01	SC-OC	14
V14-23B	G-191168	2	C	Check	2.00	DE	C	n/a	PSO-Q	RR-V01	PSO-OC	
Condensate Transfer Flush Check Valve	B-9		Active	Self					FE-Q	RR-V01	SC-OC	14

System: CS Core Spray System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V14-26A	G-191168	2	B	Globe	8.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Core Spray Pump Test Line Isolation Valve	F-10		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V14-26B	G-191168	2	B	Globe	8.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Core Spray Pump Test Line Isolation Valve	E-10		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V14-30A	G-191168	2	A	Gate	0.75	C	C	n/a	LT-2Y	n/a	LT-2Y	10
Core Spray Injection Check Valve Bypass Valve	F-7		Passive	Manual								
V14-30B	G-191168	2	A	Gate	0.75	C	C	n/a	LT-2Y	n/a	LT-2Y	10
Core Spray Injection Check Valve Bypass Valve	D-7		Passive	Manual								
V14-33A	G-191168	2	C	Check	1.00	DE	C	n/a	PSO-Q	RR-V01	PSO-RO	
Core Spray Discharge Pressurization Line Check Valve	H-11		Active	Self					FE-Q	RR-V01	SC-OC	
V14-33B	G-191168	2	C	Check	1.00	DE	C	n/a	PSO-Q	RR-V01	PSO-RO	
Core Spray Discharge Pressurization Line Check Valve	H-15		Active	Self					FE-Q	RR-V01	SC-OC	
V14-5A	G-191168	2	B	Gate	3.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Core Spray Pump Minimum Flow Valve	H-12		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V14-5B	G-191168	2	B	Gate	3.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Core Spray Pump Minimum Flow Valve	H-13		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V14-7A	G-191168	2	B	Gate	12.00	O/KL	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Core Spray Pump Suction Valve	K-11		Active	Motor, AC					ST-Q	n/a	STC-Q	

System: CS Core Spray System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V14-7B	G-191168	2	B	Gate	12.00	O/KL	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Core Spray Pump Suction Valve	L-11		Active	Motor, AC					ST-Q	n/a	STC-Q	

System: DG Diesel Generator Starting Air System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
AS-24-1A	G-191160 Sh 7	3	B	Globe	1.50	C	O	C	FE-Q	n/a	PSO-1M	
DG Starting Air Engine	B-16		Active	Solenoid					FE-Q	n/a	PSO-6M	
Inlet Valve									ST-Q	n/a	Skid-1M	
AS-24-1B	G-191160 Sh 7	3	B	Globe	1.50	C	O	C	FE-Q	n/a	PSO-1M	
DG Starting Air Engine	B-3		Active	Solenoid					FE-Q	n/a	PSO-6M	
Inlet Valve									ST-Q	n/a	Skid-1M	
AS-24-2A	G-191160 Sh 7	3	B	Globe	1.50	C	O	C	FE-Q	n/a	PSO-1M	
DG Starting Air Engine	B-17		Active	Solenoid					FE-Q	n/a	PSO-6M	
Inlet Valve									ST-Q	n/a	Skid-1M	
AS-24-2B	G-191160 Sh 7	3	B	Globe	1.50	C	O	C	FE-Q	n/a	PSO-1M	
DG Starting Air Engine	B-3		Active	Solenoid					FE-Q	n/a	PSO-6M	
Inlet Valve									ST-Q	n/a	Skid-1M	
AV-24-1A	G-191160 Sh 7	3	B	Gate	0.1875	O	C	O	FE-Q	n/a	SC-1M	
DG Starting Air Engine	B-17		Active	Solenoid					ST-Q	n/a	STC-6M	
Inlet Vent Valve												
AV-24-1B	G-191160 Sh 7	3	B	Gate	0.1875	O	C	O	FE-Q	n/a	SC-1M	
DG Starting Air Engine	B-3		Active	Solenoid					ST-Q	n/a	STC-6M	
Inlet Vent Valve												
SR-72-6A	G-191160 Sh 7	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
DG Starting Air Receiver	E-15		Active	Self					LL-10Y	n/a	LL-10Y	
Relief Valve									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-72-6B	G-191160 Sh 7	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
DG Starting Air Receiver	E-13		Active	Self					LL-10Y	n/a	LL-10Y	
Relief Valve									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	

System: DG Diesel Generator Starting Air System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SR-72-6C	G-191160 Sh 7	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
DG Starting Air Receiver Relief Valve	E-7		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-72-6D	G-191160 Sh 7	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
DG Starting Air Receiver Relief Valve	E-5		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
V72-1018A	G-191160 Sh 7	3	C	Check	0.75	DE	C	n/a	PSO-Q	n/a	PSO-Q	
DG Starting Air Receiver Inlet Check Valve	G-12		Active	Self					FE-Q	n/a	SC-Q	
V72-1018B	G-191160 Sh 7	3	C	Check	0.75	DE	C	n/a	PSO-Q	n/a	PSO-Q	
DG Starting Air Receiver Inlet Check Valve	G-8		Active	Self					FE-Q	n/a	SC-Q	

System: FO Diesel Generator Fuel Oil System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SR-78-3A	G-191162 Sh 2	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Diesel Fuel Oil Transfer Pump Discharge Relief Valve	E-6		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-78-3B	G-191162 Sh 2	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Diesel Fuel Oil Transfer Pump Discharge Relief Valve	D-6		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
V78-2	G-191162 Sh 2	3	C	Check	4.00	DE	C	n/a	FE-Q	ROJ-25	D&E-RO	
Fuel Oil Storage Tank Fill Line Check Valve	E-2		Active	Self								
V78-28A	G-191162 Sh 2	3	C	Check	1.25	DE	O	n/a	FE-Q	n/a	SC-RO	
Diesel Fuel Oil Transfer Pump Discharge Check Valve	E-6		Active	Self					FE-Q	n/a	SO-Q	
V78-28B	G-191162 Sh 2	3	C	Check	1.25	DE	O	n/a	FE-Q	n/a	SC-RO	
Diesel Fuel Oil Transfer Pump Discharge Check Valve	D-6		Active	Self					FE-Q	n/a	SO-Q	
V78-41A	G-191162 Sh 2	3	C	Check		DE	C	n/a	FE-Q	n/a	Skid-1M	
D/G Hand Priming Pump Discharge Check	G-11		Active	Self								
V78-41B	G-191162 Sh 2	3	C	Check		DE	C	n/a	FE-Q	n/a	Skid-1M	
D/G Hand Priming Pump Discharge Check	E-11		Active	Self								
V78-42A	G-191162 Sh 2	3	C	Check		DE	O/C	n/a	FE-Q	n/a	Skid-1M	
D/G Engine Driven Fuel Pump Discharge Check	G-12		Active	Self								
V78-42B	G-191162 Sh 2	3	C	Check		DE	O/C	n/a	FE-Q	n/a	Skid-1M	
D/G Engine Driven Fuel Pump Discharge Check	D-12		Active	Self								

System: FPC Fuel Pool Cooling & Cleanup System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
RV19-232A	G-191173 Sh 2	3	C	SRV	0.75 X	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Standby Fuel Pool Heat Exchanger FPC (Tube) Side Thermal Relief Valve	C-7		Active	Self	1.00				LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
RV19-232B	G-191173 Sh 2	3	C	SRV	0.75 X	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Standby Fuel Pool Heat Exchanger FPC (Tube) Side Thermal Relief Valve	F-7		Active	Self	1.00				LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
V19-18	G-191173 Sh 1	3	C	Check	6.00	DE	C	n/a	PSO-Q	n/a	PSO-Q	
Fuel Pool Demineralizer Return Check Valve	I-13		Active	Self					FE-Q	n/a	SC-Q	
V19-21A	G-191173 Sh 1	2	C	Check	6.00	DE	O	n/a	FE-Q	n/a	SC-RO	
Fuel Pool Cooling Return to Fuel Pool Check Valve	A-7		Active	Self					FE-Q	n/a	SO-Q	
V19-21B	G-191173 Sh 1	2	C	Check	6.00	DE	O	n/a	FE-Q	n/a	SC-RO	
Fuel Pool Cooling Return to Fuel Pool Check Valve	A-7		Active	Self					FE-Q	n/a	SO-Q	
V19-220	G-191173 Sh 1	3	B	Gate	8.00	O	C	As-Is	PIT-2Y	n/a	PIT-2Y	
Normal Fuel Pool Cooling Subsystem Isolation Valve	G-7		Active	Motor, AC					ST-Q	n/a	STC-Q	
V19-221	G-191173 Sh 1	3	B	Gate	8.00	O	C	As-Is	PIT-2Y	n/a	PIT-2Y	
Normal Fuel Pool Cooling Subsystem Isolation Valve	G-8		Active	Motor, AC					ST-Q	n/a	STC-Q	
V19-224	G-191173 Sh 1	3	C	Check	6.00	DE	C	n/a	PSO-Q	ROJ-V12	PSO-RO	
Fuel Pool Demineralizer Return Check Valve	I-13		Active	Self					FE-Q	ROJ-V12	SC-RO	
V19-22A	G-191173 Sh 1	3	B	Gate	6.00	C	C	n/a	S O/C-OC	n/a	S O/C-OC	12
U Gate Valve Rx Well Drain	F-6		Active	Manual								
V19-22B	G-191173 Sh 1	3	B	Gate	6.00	C	C	n/a	S O/C-OC	n/a	S O/C-OC	12
U Gate Valve Rx Well Drain	F-5		Active	Manual								

System: FPC Fuel Pool Cooling & Cleanup System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V19-230A	G-191173 Sh 2	3	C	Check	6.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
Standby Fuel Pool Cooling Pump Discharge Check Valve	G-10		Active	Self					FE-Q	n/a	SO-Q	
V19-230B	G-191173 Sh 2	3	C	Check	6.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
Standby Fuel Pool Cooling Pump Discharge Check Valve	H-10		Active	Self					FE-Q	n/a	SO-Q	
V19-30	G-191173 Sh 1	3	C	Check	8.00	DE	C	n/a	PSO-Q	n/a	PSO-RO	
FPCCU Check Valve	H-5		Active	Self					FE-Q	n/a	SC-Q	13
V19-37	G-191173 Sh 1	3	B	Gate	4.00	C	C	n/a	S O/C-OC	n/a	S O/C-OC	12
FPCCU Dryer Separator Pit Drain	F-2		Active	Manual								
V19-46	G-191173 Sh 1	3	B	Gate	4.00	C	C	n/a	S O/C-OC	n/a	S O/C-OC	
U Gate Valve F/D Bypass	K-6		Active	Manual								

System: HPCI High Pressure Coolant Injection System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
FCV-23-42	G-191169 Sh 1	NNS	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
HPCI Steam Line Drain Pot Isolation valve	K-13		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FCV-23-43	G-191169 Sh 1	NNS	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
HPCI Steam Line Drain Pot Isolation valve	K-14		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
HPCI-CONTROL	G-191169 Sh 2	2	B	Globe	10.00	O	O	C	PIT-2Y	n/a	PIT-2Y	
HPCI Steam Supply Turbine Control Valve	F-13		Active	Hydraulic					FE-Q	n/a	Skid-Q	
HPCI-STOP	G-191169 Sh 2	2	B	Gate	10.00	C	O/C	C	PIT-2Y	n/a	PIT-2Y	
HPCI Turbine Stop Valve	F-15		Active	Hydraulic					FE-Q	n/a	Skid-Q	
LCV-23-39	G-191169 Sh 2	3	B	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
HPCI Gland Seal Return Level Cont. Drain Valve to Radwaste	M-11		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
LCV-23-40	G-191169 Sh 2	3	B	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
HPCI Gland Seal Return Level Cont. Drain Valve to Radwaste	M-11		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
LCV-23-53	G-191169 Sh 1	2	B	Globe	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
Main Steam Drain Trap Bypass & Strainer Blowoff Trap Bypass	H-14		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: HPCI High Pressure Coolant Injection System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
LCV-23-54	G-191169 Sh 2	2	B	Globe	1.00	C	O/C	O	FST-Q	n/a	FST-Q	
HPCI Drain to Gland Seal Condenser	I-12		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
PCV-23-50	G-191169 Sh 2	2	B	Globe	2.00	O	O	O	FE-Q	n/a	Skid-Q	
Pressure Control Valve Cooling Water to Lube Oil Cooler	J-12		Active	Hydraulic								
S-23-6	G-191169 Sh 1	2	D	Rupture Disk	16.00	C	O/C	n/a	RD-5Y	n/a	RD-5Y	
HPCI Turbine Exhaust Line Rupture Disc	I-6		Active	Self								
S-23-7	G-191169 Sh 1	NNS	D	Rupture Disk	16.00	C	O/C	n/a	RD-5Y	n/a	RD-5Y	
HPCI Turbine Exhaust Line Rupture Disc	H-6		Active	Self								
SL-23-37A	G-191169 Sh 1	2	A/C	Ex. Flow Check	0.75	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Nuclear Boiler Vessel Inst. Excess Flow Check Valve	F-5		Active	Self								
SL-23-37B	G-191169 Sh 1	2	A/C	Ex. Flow Check	0.75	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Nuclear Boiler Vessel Inst. Excess Flow Check Valve	F-5		Active	Self								
SL-23-37C	G-191169 Sh 1	2	A/C	Ex. Flow Check	0.75	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Nuclear Boiler Vessel Inst. Excess Flow Check Valve	F-5		Active	Self								
SL-23-37D	G-191169 Sh 1	2	A/C	Ex. Flow Check	0.75	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Nuclear Boiler Vessel Inst. Excess Flow Check Valve	F-5		Active	Self								
SR-23-34	G-191169 Sh 2	2	C	SRV	1.50	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
HPCI Suction Line Relief Valve	D-9		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	

System: HPCI High Pressure Coolant Injection System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SR-23-66	G-191169 Sh 2	2	C	SRV	1.50	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
HPCI Booster Pump Gland Seal Cond. Line Relief Valve	J-12		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SSC-23-13	G-191169 Sh 1	2	C	Stop Check	2.00	C	O/C	n/a	FE-Q	ROJ-V24	SC-RO	
HPCI Turbine Exhaust Drain Stop Check Valve	J-4		Active	Self					FE-Q	n/a	SO-Q	
V23-130	G-191169 Sh 2	2	C	Check	2.00	DE	O	n/a	FE-Q	n/a	Skid-Q	
HPCI Gland Seal Tube Side Return Check Valve	L-11		Active	Self								
V23-131	G-191169 Sh 2	2	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	Skid-Q	
HPCI Gland Seal Cond. Shell Side Return Check Valve	L-11		Active	Self								
V23-14	G-191169 Sh 1	2	B	Gate	10.00	C	O	As-Is	PIT-2Y	n/a	PIT-2Y	
HPCI Steam Supply Valve	F-13		Active	Motor, DC					ST-Q	n/a	STO-Q	
V23-148A	G-191169 Sh 2	3	C	Check	1.00	DE	O	n/a	FE-Q	n/a	Skid-Q	
HPCI Steam Ring/Chest Drain Check Valve	G-14		Active	Self								
V23-148B	G-191169 Sh 2	3	C	Check	1.00	DE	O	n/a	FE-Q	n/a	Skid-Q	
HPCI Steam Ring/Chest Drain Check Valve	G-14		Active	Self								
V23-15	G-191169 Sh 1	1	A	Gate	10.00	O	O/C	As-Is	LJ	n/a	LJ-Perf.	
HPCI Steam Supply Inboard Containment Isolation Valve	D-4		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V23-16	G-191169 Sh 1	1	A	Gate	10.00	O	O/C	As-Is	LJ	n/a	LJ-Perf.	
HPCI Steam Supply Inboard Containment Isolation Valve	D-5		Active	Motor, DC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: HPCI High Pressure Coolant Injection System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V23-17	G-191169 Sh 1	2	B	Gate	14.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
HPCI Pump Suction Valve from Condensate Storage Tank	D-11		Active	Motor, DC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V23-18	G-191169 Sh 1	2	C	Check	14.00	DE	O/C	n/a	FE-Q	CSJ-V03	SC-CS	
HPCI Pump Discharge to Feedwater Check Valve	G-5		Active	Self					FE-Q	CSJ-V03	SO-CS	
V23-19	G-191169 Sh 1	2	B	Gate	14.00	C	O	As-Is	PIT-2Y	n/a	PIT-2Y	
HPCI Discharge to Feedwater Isolation Valve	G-6		Active	Motor, DC					ST-Q	n/a	STO-Q	
V23-20	G-191169 Sh 1	2	B	Gate	14.00	O	O	As-Is	PIT-2Y	n/a	PIT-2Y	
HPCI Pump Discharge Valve	G-8		Active	Motor, DC					ST-Q	n/a	STO-Q	
V23-20B	G-191169 Sh 1	2	C	Check	1.00	DE	C	n/a	PSO-Q	n/a	PSO-RO	
Pressurizing and Vent Valves HPCI to RX Keep Fill	G-7		Active	Self					FE-Q	RR-V01	SC-OC	
V23-21	G-191169 Sh 1	2	B	Globe	10.00	C	C	As-Is	PIT-2Y	n/a	PIT-2Y	
HPCI Pump Test Return Valve to Condensate Storage Tank	E-7		Active	Motor, DC					ST-Q	n/a	STC-Q	
V23-25	G-191169 Sh 1	2	B	Globe	4.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
HPCI Pump Minimum Recirc Valve	F-9		Active	Motor, DC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V23-3	G-191169 Sh 1	2	C	Check	20.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
HPCI Exhaust Line Inboard Nozzle Check	I-3		Active	Self					FE-Q	ROJ-V14	SC-RO	
									FE-Q	n/a	SO-Q	
V23-32	G-191169 Sh 1	2	C	Check	14.00	DE	O/C	n/a	FE-Q	RR-V01	SC-OC	
HPCI Pump Suction Check Valve from Cond. Storage Tank	E-11		Active	Self					FE-Q	n/a	SO-Q	

System: HPCI High Pressure Coolant Injection System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V23-4	G-191169 Sh 1	2	C	Check	20.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
HPCI Exhaust Line	I-3		Active	Self					FE-Q	ROJ-V14	SC-RO	
Outboard Nozzle Check									FE-Q	n/a	SO-Q	
V23-50A	G-191169 Sh 2	2	B	Gate	2.00	C	O	O	PIT-2Y	n/a	PIT-2Y	
HPCI Gland Seal Cond.	J-10		Active	Air					FE-Q	n/a	Skid-Q	
Supply Valve												
V23-56	G-191169 Sh 1	2	C	Check	2.00	DE	O	n/a	FE-Q	ROJ-V24	SC-RO	
HPCI Turbine Exhaust	J-5		Active	Self					FE-Q	n/a	SO-Q	
Drain Check Valve												
V23-57	G-191169 Sh 1	2	B	Gate	16.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
HPCI Torus Suction	F-10		Active	Motor, DC					ST-Q	n/a	STC-Q	
Containment Isolation												
Valve - Outbd									ST-Q	n/a	STO-Q	
V23-58	G-191169 Sh 1	2	B	Gate	16.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
HPCI Torus Suction	L-4		Active	Motor, DC					ST-Q	n/a	STC-Q	
Containment Isolation												
Valve - Inbd									ST-Q	n/a	STO-Q	
V23-61	G-191169 Sh 1	2	C	Check	16.00	DE	O	n/a	FE-Q	ROJ-25	D&E-RO	
HPCI Torus Suction Check	L-6		Active	Self								
Valve												
V23-62	G-191169 Sh 1	2	C	Check	4.00	DE	O/C	n/a	FE-Q	ROJ-25	D&E-RO	
HPCI Pump Minimum	J-10		Active	Self					PSO-Q	n/a	PSO-Q	
Recirc Check Valve												
V23-845	G-191169 Sh 1	2	A/C	Check	3.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
HPCI Turbine Exhaust	I-2		Active	Self					FE-Q	ROJ-V18	SC-RO	
Vacuum Breaker									FE-Q	ROJ-V18	SO-RO	
V23-846	G-191169 Sh 1	2	A/C	Check	3.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
HPCI Turbine Exhaust	I-2		Active	Self					FE-Q	ROJ-V18	SC-RO	
Vacuum Breaker									FE-Q	ROJ-V18	SO-RO	

System: HVAC Heating, Ventilation, & Air Conditioning Systems

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SACC-1A-CHECK	G-191237 Sh 2	3	C	Check	1.375	DE	O	n/a	FE-Q	n/a	Skid-Q	
Cont. Room HVAC Chiller Refrigerant Piping Check Valve	I-3		Active	Self								
SACC-1B-CHECK	G-191237 Sh 2	3	C	Check	1.375	DE	O	n/a	FE-Q	n/a	Skid-Q	
Cont. Room HVAC Chiller Refrigerant Piping Check Valve	I-4		Active	Self								
SB-10	G-191238	2	B	Butterfly	54.00	O	C	C	FST-Q	n/a	FST-Q	
RX Building Supply Isolation Valve	H-8		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SB-11	G-191238	2	B	Butterfly	54.00	O	C	C	FST-Q	n/a	FST-Q	
Rx Bldg. Exhaust to Stack Secondary Containment Isolation Valve	G-8		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SB-12	G-191238	2	B	Butterfly	54.00	O	C	C	FST-Q	n/a	FST-Q	
Rx Bldg. Exhaust to Stack Secondary Containment Isolation Valve	G-9		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SB-9	G-191238	2	B	Butterfly	54.00	O	C	C	FST-Q	n/a	FST-Q	
RX Building Supply Isolation Valve	H-9		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SCW-46A	G-191237 Sh 2	3	B	3-Way	2.00	O	O	O	FST-Q	n/a	FST-Q	
SAC-1 Temperature Control Valve Heating and Vent Room	B-6		Active	Air					ST-Q	n/a	STO-Q	
SCW-65A	G-191237 Sh 2	3	B	Globe	0.75	C	C	n/a	S O/C-OC	n/a	S O/C-OC	
HVAC Expansion Tank Isolation Valve	D-4		Active	Manual								

System: HVAC Heating, Ventilation, & Air Conditioning Systems

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SCW-8A	G-191237 Sh 2	3	C	Check	3.00	DE	O	n/a	FE-Q	n/a	SC-RO	
Control Room HVAC Chilled Water Pump Disch Check Valve	E-5		Active	Self					FE-Q	n/a	SO-Q	
SR-SACC-1A-1	G-191237 Sh 2	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Cont. Room HVAC Chiller Refrigerant Piping Relief Valve	H-3		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-SACC-1A-2	G-191237 Sh 2	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Cont. Room HVAC Chiller Refrigerant Piping Relief Valve	H-3		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-SACC-1B-1	G-191237 Sh 2	3	C	SRV	1.25	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Cont. Room HVAC Chiller Refrigerant Piping Relief Valve	H-4		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	

System: SBGT Heating, Ventilation, & Air Conditioning Systems

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SB-1-125-1A	G-191238	2	B	Butterfly	12.00	C	O	O	FST-Q	n/a	FST-Q	
Standby Gas Treatment	G-8		Active	Air					PIT-2Y	n/a	PIT-2Y	
Train Inlet Valve									ST-Q	n/a	STO-Q	
SB-1-125-1B	G-191238	2	B	Butterfly	12.00	C	O	O	FST-Q	n/a	FST-Q	
Standby Gas Treatment	G-7		Active	Air					PIT-2Y	n/a	PIT-2Y	
Train Inlet Valve									ST-Q	n/a	STO-Q	
SB-1-125-2A	G-191238	2	B	Butterfly	12.00	O	O/C	O	FST-Q	n/a	FST-Q	
Standby Gas Treatment	H-6		Active	Air					PIT-2Y	n/a	PIT-2Y	
Train Inlet Valve									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
SB-1-125-2B	G-191238	2	B	Butterfly	12.00	C	O/C	O	FST-Q	n/a	FST-Q	
Standby Gas Treatment	H-6		Active	Air					PIT-2Y	n/a	PIT-2Y	
Train Inlet Valve									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
SB-1-125-3A	G-191238	2	B	Butterfly	12.00	O	O	O	FST-Q	n/a	FST-Q	
Standby Gas Treatment	G-6		Active	Air					PIT-2Y	n/a	PIT-2Y	
Train Discharge Valve									ST-Q	n/a	STO-Q	
SB-1-125-3B	G-191238	2	B	Butterfly	12.00	C	O	O	FST-Q	n/a	FST-Q	
Standby Gas Treatment	G-6		Active	Air					PIT-2Y	n/a	PIT-2Y	
Train Discharge Valve									ST-Q	n/a	STO-Q	
SB-1-125-4A	G-191238	2	B	Butterfly	12.00	C	O/C	C	FST-Q	n/a	FST-Q	
Standby Gas Treatment	H-7		Active	Air					PIT-2Y	n/a	PIT-2Y	
Train Dilution Valve									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
SB-1-125-4B	G-191238	2	B	Butterfly	12.00	C	O/C	C	FST-Q	n/a	FST-Q	
Standby Gas Treatment	H-6		Active	Air					PIT-2Y	n/a	PIT-2Y	
Train Dilution Valve									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: SBGT Heating, Ventilation, & Air Conditioning Systems

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SB-1-125-5	G-191238	2	B	Butterfly	4.00	C	O/C	C	FST-Q	n/a	FST-Q	
Standby Gas Treatment Train X-Conn. Valve	G-6		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
SGT-7A	G-191238	2	C	Check	12.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
Standby Gas Treatment Train Discharge Check Valve	F-7		Active	Self					FE-Q	n/a	SO-Q	
SGT-7B	G-191238	2	C	Check	12.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
Standby Gas Treatment Train Discharge Check Valve	F-6		Active	Self					FE-Q	n/a	SO-Q	

System: IA Instrument Air and Nitrogen Supply Systems

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SR-16-19-77	G-191175 Sh 2	3	C	SRV	1.00X1.	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Nitrogen Supply Safety	A-11		Active	Self	50				LL-10Y	n/a	LL-10Y	
Relief Valve									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-72-1	G-191160 Sh 4	3	C	SRV	1.00X1.	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
ADS N2 Backup Supply	K-3		Active	Self	00				LL-10Y	n/a	LL-10Y	
Relief Valve									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-72-10A	G-191160 Sh 8	3	C	SRV	0.25	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
N2 Supply Relief Valve	C-5		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-72-10B	G-191160 Sh 8	3	C	SRV	0.25	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
N2 Supply Relief Valve	C-4		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-72-5	G-191160 Sh 3	3	C	SRV	1.00X1.	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
CAC Air / N2 Receiver	E-14		Active	Self	50				LL-10Y	n/a	LL-10Y	
Relief Valve									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-72-9A	G-191160 Sh 8	3	C	SRV	0.25	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
N2 Supply Relief Valve	F-5		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-72-9B	G-191160 Sh 8	3	C	SRV	0.25	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
N2 Supply Relief Valve	F-4		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	

System: IA Instrument Air and Nitrogen Supply Systems

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V72-102	G-191160 Sh 4	2	A/C	Check	1.50	DE	O/C	n/a	LJ	n/a	LJ-RO	
ADS N2 Supply	K-2		Active	Self					FE-Q	ROJ-V22	SC-RO	
Containment Isolation Valve									FE-Q	ROJ-V22	SO-RO	
V72-109	G-191160 Sh 4	3	A/C	Ball Check	1.50	DE	C	n/a	LT-2Y	n/a	LT-RO	
ADS N2 Normal Supply	K-2		Active	Self					PSO-Q	ROJ-V22	PSO-RO	
Valve									FE-Q	ROJ-V22	SC-RO	
V72-125	G-191160 Sh 4	3	C	Check	1.50	DE	O	n/a	FE-Q	ROJ-V22	SC-RO	
ADS N2 Backup Supply	K-3		Active	Self					FE-Q	ROJ-V22	SO-RO	
Check Valve												
V72-28A	G-191160 Sh 3	NNS	B	Globe	1.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	
Isolation to Outboard	L-15		Active	Manual								
MSIVs												
V72-28B	G-191160 Sh 3	NNS	B	Globe	1.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	
Isolation to Outboard	L-16		Active	Manual								
MSIVs												
V72-28D	G-191160 Sh 3	NNS	B	Globe	1.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	
Isolation to Outboard	K-16		Active	Manual								
MSIVs												
V72-28E	G-191160 Sh 3	NNS	B	Globe	1.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	
Isolation to Outboard	K-16		Active	Manual								
MSIVs												
V72-33	G-191160 Sh 4	2	A/C	Check	1.50	DE	O/C	n/a	LJ	n/a	LJ-RO	
ADS N2 Supply	K-1		Active	Self					FE-Q	ROJ-V22	SC-RO	
Containment Isolation Valve									FE-Q	ROJ-V22	SO-RO	
V72-38A	G-191160 Sh 3	2	A	Globe	2.00	O	C	C	FST-Q	n/a	FST-Q	
PCAC Compressor Inlet	E-17		Active	Air					LJ	n/a	LJ-Perf.	
Containment Isolation Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	

System: IA Instrument Air and Nitrogen Supply Systems

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V72-38B	G-191160 Sh 3	2	A	Globe	2.00	O	C	C	FST-Q	n/a	FST-Q	
PCAC Compressor Inlet	F-17		Active	Air					LJ	n/a	LJ-Perf.	
Containment Isolation Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
V72-609	G-191160 Sh 8	3	A/C	Check	0.375	DE	C	n/a	LT-2Y	n/a	LT-2Y	
Instrument Air to Reactor	E-4		Active	Self					PSO-Q	n/a	PSO-Q	
Building Railroad Airlock									FE-Q	n/a	SC-Q	
V72-610	G-191160 Sh 8	3	A/C	Check	0.375	DE	C	n/a	LT-2Y	n/a	LT-2Y	
Instrument Air to Reactor	E-4		Active	Self					PSO-Q	n/a	PSO-Q	
Building Railroad Airlock									FE-Q	n/a	SC-Q	
V72-89B	G-191160 Sh 3	2	A/C	Check	1.50	DE	C	n/a	LJ	n/a	LJ-RO	
Drywell Instrument Air	K-14		Active	Self					PSO-Q	ROJ-V11	PSO-RO	
Supply Check Valve									FE-Q	ROJ-V11	SC-RO	
V72-89C	G-191160 Sh 3	2	A/C	Check	1.50	DE	C	n/a	LJ	n/a	LJ-RO	
Drywell Instrument Air	K-15		Active	Self					PSO-Q	ROJ-V11	PSO-RO	
Supply Check Valve									FE-Q	ROJ-V11	SC-RO	
V72-918C	G-191160 Sh 1	3	B	Gate	0.50	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
FCV-104-28A Air Supply	D-18		Active	Manual								
Isolation; (ACS; OP 2181)												
V72-918E	G-191160 Sh 1	3	B	Gate	0.50	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
FCV-104-28B Air Supply	D-18		Active	Manual								
Isolation; (ACS; OP 2181)												

System: SA Service Air System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SR-72-3A	G-191160 Sh 5	3	C	SRV	2.00X3.	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SA / IA Air Receiver Relief Valve	G-9		Active	Self	00				LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-72-3B	G-191160 Sh 5	3	C	SRV	2.00X3.	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SA/IA Air Receiver Relief Valve	J-9		Active	Self	00				LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	

System: NB Nuclear Boiler and Vessel Instrumentation

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
FCV-2-17	G-191167	2	B	Globe	1.00	C	C	C	PIT-2Y	n/a	PIT-2Y	
Rx Vessel Head Steam Space Vent Flow Control Valve	B-6		Passive	Air								
FCV-2-18	G-191167	1	B	Globe	1.00	C	C	C	PIT-2Y	n/a	PIT-2Y	
Rx Vessel Head Steam Space Vent Flow Control Valve	B-5		Passive	Air								
FCV-2-20	G-191167	1	B	Globe	1.00	O	O	O	PIT-2Y	n/a	PIT-2Y	
Rx Vessel Head Seal Leakage Flow Control Valve	C-6		Passive	Air								
FCV-2-21	G-191167	2	B	Globe	1.00	C	C	C	PIT-2Y	n/a	PIT-2Y	
Rx Vessel Head Seal Leakage Flow Control Valve	C-5		Passive	Air								
FCV-2-39	G-191167	2	A	Globe	0.75	C	C	C	FST-Q	n/a	FST-Q	
Rx Recirc Sample Line Flow Control/Isolation Valve	L-4		Active	Air					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
FCV-2-40	G-191167	2	A	Globe	0.75	C	C	C	FST-Q	n/a	FST-Q	
Rx Recirc Sample Line Flow Control/Isolation Valve	L-3		Active	Air					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	

System: NB Nuclear Boiler and Vessel Instrumentation

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
RV-2-71A	G-191167	1	C	SRV	6.00X1	C	O/C	n/a	AA-5Y	n/a	AA-5Y	
Nuclear Boiler Safety/Relief	D-8		Active	Self	0.00				BA-5Y	n/a	BA-5Y	
Valve									LA-5Y	n/a	LA-5Y	14
									LL-5Y	n/a	LL-5Y	
									PD-5Y	n/a	PD-5Y	
									PI-5Y	n/a	PI-5Y	
									SP-5Y	n/a	SP-5Y	
									SV-5Y	n/a	SV-5Y	
									VE-5Y	n/a	VE-5Y	
RV-2-71B	G-191167	1	C	SRV	6.00X1	C	O/C	n/a	AA-5Y	n/a	AA-5Y	
Nuclear Boiler Safety/Relief	G-8		Active	Self	0.00				BA-5Y	n/a	BA-5Y	
Valve									LA-5Y	n/a	LA-5Y	14
									LL-5Y	n/a	LL-5Y	
									PD-5Y	n/a	PD-5Y	
									PI-5Y	n/a	PI-5Y	
									SP-5Y	n/a	SP-5Y	
									SV-5Y	n/a	SV-5Y	
									VE-5Y	n/a	VE-5Y	
RV-2-71C	G-191167	1	C	SRV	6.00X1	C	O/C	n/a	AA-5Y	n/a	AA-5Y	
Nuclear Boiler Safety/Relief	G-8		Active	Self	0.00				BA-5Y	n/a	BA-5Y	
Valve									LA-5Y	n/a	LA-5Y	14
									LL-5Y	n/a	LL-5Y	
									PD-5Y	n/a	PD-5Y	
									PI-5Y	n/a	PI-5Y	
									SP-5Y	n/a	SP-5Y	
									SV-5Y	n/a	SV-5Y	
									VE-5Y	n/a	VE-5Y	

System: NB Nuclear Boiler and Vessel Instrumentation

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
RV-2-71D	G-191167	1	C	SRV	6.00X1	C	O/C	n/a	AA-5Y	n/a	AA-5Y	
Nuclear Boiler Safety/Relief Valve	H-8		Active	Self	0.00				BA-5Y	n/a	BA-5Y	
									LA-5Y	n/a	LA-5Y	14
									LL-5Y	n/a	LL-5Y	
									PD-5Y	n/a	PD-5Y	
									PI-5Y	n/a	PI-5Y	
									SP-5Y	n/a	SP-5Y	
									SV-5Y	n/a	SV-5Y	
									VE-5Y	n/a	VE-5Y	
SL-2-2-7A	G-191159 Sh 5	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Recirculation Pump Inst. Excess Flow Check Valve	G-2		Active	Self								
SL-2-2-7B	G-191159 Sh 5	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Recirculation Pump Inst. Excess Flow Check Valve	G-2		Active	Self								
SL-2-2-8A	G-191159 Sh 5	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Recirculation Pump Inst. Excess Flow Check Valve	G-2		Active	Self								
SL-2-2-8B	G-191159 Sh 5	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Recirculation Pump Inst. Excess Flow Check Valve	G-2		Active	Self								
SL-2-3-11	G-191267 Sh 1	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Nuclear Boiler Vessel Inst. Excess Flow Check Valve	C-6		Active	Self								
SL-2-3-13A	G-191267 Sh 1	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Nuclear Boiler Vessel Inst. Excess Flow Check Valve	D-6		Active	Self								
SL-2-3-13B	G-191267 Sh 1	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Nuclear Boiler Vessel Inst. Excess Flow Check Valve	C-12		Active	Self								

System: NB Nuclear Boiler and Vessel Instrumentation

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SL-2-3-15A Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 D-6	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-15B Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 D-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-17A Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 E-6	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-17B Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 E-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-19A Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-6	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-19B Nuclear Boiler Vessel Inst Excess Flow Check Valve	G-191267 Sh 1 F-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-21A Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 H-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-21B Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191165 C-13	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-21C Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 H-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-21D Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191165 C-13	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	

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Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SL-2-3-23A Nuclear Boiler Vessel Inst Excess Flow Check Valve	G-191267 Sh 1 G-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-23B Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 G-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-23C Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 G-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-23D Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 G-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-25 Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 I-6	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-27 Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 I-6	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31A Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31B Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31C Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31D Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	

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Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SL-2-3-31E Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31F Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31G Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31H Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-6	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31I Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31J Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31K Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31L Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31M Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31N Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	

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Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SL-2-3-31P Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-31Q Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 F-12	1	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-33 Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 I-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-3-35 Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191267 Sh 1 J-6	2	A/C Active	Ex. Flow Check Self	1.00	O	C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-305A Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 M-2	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-305B Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 M-2	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-62A Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 I-13	2	A/C Active	Ex. Flow Check Self	1.00	O	C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-62B Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 I-13	2	A/C Active	Ex. Flow Check Self	1.00	O	C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-62C Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 J-13	2	A/C Active	Ex. Flow Check Self	1.00	O	C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-62D Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 J-13	2	A/C Active	Ex. Flow Check Self	1.00	O	C	n/a	FE-Q	RR-V02	LEF-10Y*	

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Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SL-2-64A Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 K-13	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-64B Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 K-13	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-64C Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 K-13	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-64D Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 L-13	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-73A Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 F-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-73B Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 F-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-73C Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 G-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-73D Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 G-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-73E Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 G-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
SL-2-73F Nuclear Boiler Vessel Inst. Excess Flow Check Valve	G-191167 G-12	2	A/C Active	Ex. Flow Check Self	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	

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Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SL-2-73G	G-191167	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Nuclear Boiler Vessel Inst. Excess Flow Check Valve	H-12		Active	Self								
SL-2-73H	G-191167	2	A/C	Ex. Flow Check	1.00	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
Nuclear Boiler Vessel Inst. Excess Flow Check Valve	H-12		Active	Self								
SR-2-14E	G-191167	3	C	Check	10.00	DE	O/C	n/a	SC-2Y	n/a	SC-2Y	
SRV Discharge Line Vacuum Relief Valve	L-12		Active	Self					SO-2Y	n/a	SO-2Y	
									SP-2Y	n/a	SP-2Y	
SR-2-14F	G-191167	3	C	Check	10.00	DE	O/C	n/a	SC-2Y	n/a	SC-2Y	
SRV Discharge Line Vacuum Relief Valve	L-12		Active	Self					SO-2Y	n/a	SO-2Y	
									SP-2Y	n/a	SP-2Y	
SR-2-14G	G-191167	3	C	Check	10.00	DE	O/C	n/a	SC-2Y	n/a	SC-2Y	
SRV Discharge Line Vacuum Relief Valve	L-12		Active	Self					SO-2Y	n/a	SO-2Y	
									SP-2Y	n/a	SP-2Y	
SR-2-14H	G-191167	3	C	Check	10.00	DE	O/C	n/a	SC-2Y	n/a	SC-2Y	
SRV Discharge Line Vacuum Relief Valve	L-12		Active	Self					SO-2Y	n/a	SO-2Y	
									SP-2Y	n/a	SP-2Y	
SR-2-14I	G-191167	3	C	Check	10.00	DE	O/C	n/a	SC-2Y	n/a	SC-2Y	
SRV Discharge Line Vacuum Relief Valve	L-12		Active	Self					SO-2Y	n/a	SO-2Y	
									SP-2Y	n/a	SP-2Y	
SR-2-14J	G-191167	3	C	Check	10.00	DE	O/C	n/a	SC-2Y	n/a	SC-2Y	
SRV Discharge Line Vacuum Relief Valve	L-12		Active	Self					SO-2Y	n/a	SO-2Y	
									SP-2Y	n/a	SP-2Y	
SR-2-14K	G-191167	3	C	Check	10.00	DE	O/C	n/a	SC-2Y	n/a	SC-2Y	
SRV Discharge Line Vacuum Relief Valve	L-12		Active	Self					SO-2Y	n/a	SO-2Y	
									SP-2Y	n/a	SP-2Y	

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Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SR-2-14L	G-191167	3	C	Check	10.00	DE	O/C	n/a	SC-2Y	n/a	SC-2Y	
SRV Discharge Line Vacuum Relief Valve	L-12		Active	Self					SO-2Y	n/a	SO-2Y	
									SP-2Y	n/a	SP-2Y	
SV-2-70A	G-191167	1	C	SRV	6.00X8.00	C	O/C	n/a	LA-5Y	n/a	LA-5Y	14
Nuclear Boiler Safety/Relief Valve	D-8		Active	Self					LL-5Y	n/a	LL-5Y	
									SP-5Y	n/a	SP-5Y	
									VE-5Y	n/a	VE-5Y	
SV-2-70B	G-191167	1	C	SRV	6.00X8.00	C	O/C	n/a	LA-5Y	n/a	LA-5Y	14
Nuclear Boiler Safety/Relief Valve	H-8		Active	Self					LL-5Y	n/a	LL-5Y	
									SP-5Y	n/a	SP-5Y	
									VE-5Y	n/a	VE-5Y	
V2-27A	G-191167	1	A/C	Check	16.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
Reactor Feedwater Line 'A' Check Valve	F-3		Active	Self					FE-Q	ROJ-V01	SC-RO	
									FE-Q	n/a	SO-Q	
V2-27B	G-191167	2	C	Check	16.00	DE	C	n/a	PSO-Q	n/a	PSO-Q	
Reactor Feedwater Line 'B' Third Check Valve	H-2		Active	Self					FE-Q	ROJ-V01	SC-RO	
V2-28A	G-191167	1	A/C	Check	16.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
Reactor Feedwater Line 'A' Check Valve	F-5		Active	Self					FE-Q	ROJ-V01	SC-RO	
									FE-Q	n/a	SO-Q	
V2-28B	G-191167	1	A/C	Check	16.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
Reactor Feedwater Line 'B' Check Valve	H-5		Active	Self					FE-Q	ROJ-V01	SC-RO	
									FE-Q	n/a	SO-Q	
V2-3-430A	G-191267 Sh 2	2	A/C	Check	0.375	DE	C	n/a	LJ	n/a	LJ-RO	
Reference Leg Back Fill Inlet Check Valve	C-9		Active	Self					PSO-Q	ROJ-V10	PSO-RO	
									FE-Q	ROJ-V10	SC-RO	

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Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V2-3-430B	G-191267 Sh 2	2	A/C	Check	0.375	DE	C	n/a	LJ	n/a	LJ-RO	
Reference Leg Back Fill	E-9		Active	Self					PSO-Q	ROJ-V10	PSO-RO	
Inlet Check Valve									FE-Q	ROJ-V10	SC-RO	
V2-3-432A	G-191267 Sh 2	2	A/C	Check	0.375	DE	C	n/a	LJ	n/a	LJ-RO	
Reference Leg Back Fill	C-10		Active	Self					PSO-Q	ROJ-V10	PSO-RO	
Check Valve									FE-Q	ROJ-V10	SC-RO	
V2-3-432B	G-191267 Sh 2	2	A/C	Check	0.375	DE	C	n/a	LJ	n/a	LJ-RO	
Reference Leg Back Fill	E-10		Active	Self					PSO-Q	ROJ-V10	PSO-RO	
Check Valve									FE-Q	ROJ-V10	SC-RO	
V2-3-433A	G-191267 Sh 2	2	A/C	Check	0.375	DE	C	n/a	LJ	n/a	LJ-RO	
Reference Leg Back Fill	F-9		Active	Self					PSO-Q	ROJ-V10	PSO-RO	
Inlet Check Valve									FE-Q	ROJ-V10	SC-RO	
V2-3-433B	G-191267 Sh 2	2	A/C	Check	0.375	DE	C	n/a	LJ	n/a	LJ-RO	
Reference Leg Back Fill	H-9		Active	Self					PSO-Q	ROJ-V10	PSO-RO	
Inlet Check Valve									FE-Q	ROJ-V10	SC-RO	
V2-3-435A	G-191267 Sh 2	2	A/C	Check	0.375	DE	C	n/a	LJ	n/a	LJ-RO	
Reference leg Back Fill	F-10		Active	Self					PSO-Q	ROJ-V10	PSO-RO	
Inlet Check Valve									FE-Q	ROJ-V10	SC-RO	
V2-3-435B	G-191267 Sh 2	2	A/C	Check	0.375	DE	C	n/a	LJ	n/a	LJ-RO	
Reference Leg Back Fill	H-10		Active	Self					PSO-Q	ROJ-V10	PSO-RO	
Inlet Check Valve									FE-Q	ROJ-V10	SC-RO	
V2-37A	G-191167	2	A/C	Check	1.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
MSRV Actuator Nitrogen	B-8		Active	Self					FE-Q	ROJ-V02	SC-RO	
Supply Check Valve									FE-Q	ROJ-V22	SO-RO	
V2-37B	G-191167	2	A/C	Check	1.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
MSRV Actuator Nitrogen	G-9		Active	Self					FE-Q	ROJ-V02	SC-RO	
Supply Check Valve									FE-Q	ROJ-V22	SO-RO	

System: NB Nuclear Boiler and Vessel Instrumentation

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V2-37C	G-191167	2	A/C	Check	1.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
MSRV Actuator Nitrogen Supply Check Valve	G-9		Active	Self					FE-Q	ROJ-V02	SC-RO	
									FE-Q	ROJ-V22	SO-RO	
V2-37D	G-191167	2	A/C	Check	1.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
MSRV Actuator Nitrogen Supply Check Valve	H-9		Active	Self					FE-Q	ROJ-V02	SC-RO	
									FE-Q	ROJ-V22	SO-RO	
V2-39AA	G-191167	2	A/C	Check	0.50	DE	O/C	n/a	LJ	n/a	LJ-RO	
Penetration X-41 Thermal Relief Check Valve	L-4		Active	Self					FE-Q	ROJ-V17	SC-RO	
									FE-Q	ROJ-V17	SO-RO	
V2-53A	G-191167	1	B	Gate	28.00	O	C	As-Is	PIT-2Y	n/a	PIT-2Y	
Rx Recirculation Pump Discharge Isolation Valve	L-9		Active	Motor, AC					ST-Q	CSJ-V02	STC-CS	
V2-53B	G-191167	1	B	Gate	28.00	O	C	As-Is	PIT-2Y	n/a	PIT-2Y	
Rx Recirculation Pump Discharge Isolation Valve	L-9		Active	Motor, AC					ST-Q	CSJ-V02	STC-CS	
V2-54A	G-191167	1	B	Gate	4.00	O	C	As-Is	PIT-2Y	n/a	PIT-2Y	
Rx Recirculation Pump Discharge Bypass Valve	L-9		Active	Motor, AC					ST-Q	CSJ-V02	STC-CS	
V2-54B	G-191167	1	B	Gate	4.00	O	C	As-Is	PIT-2Y	n/a	PIT-2Y	
Rx Recirculation Pump Discharge Bypass Valve	L-9		Active	Motor, AC					ST-Q	CSJ-V02	STC-CS	
V2-74	G-191167	1	A	Gate	3.00	C	C	As-Is	LJ	n/a	LJ-Perf.	
Main Steam Line Drain Containment Isolation Valve	E-10		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
V2-74A	G-191167	2	A/C	Check	0.50	DE	O/C	n/a	LJ	n/a	LJ-RO	
Penetration X-8 Thermal Relief Check Valve	D-10		Active	Self					FE-Q	ROJ-V17	SC-RO	
									FE-Q	ROJ-V17	SO-RO	
V2-77	G-191167	1	A	Gate	3.00	C	C	As-Is	LJ	n/a	LJ-Perf.	
Main Steam Line Drain Containment Isolation Valve	E-13		Active	Motor, DC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	

System: NB Nuclear Boiler and Vessel Instrumentation

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V2-80A	G-191167	1	A	Globe	18.00	O	C	C	FST-Q	n/a	FST-Q	
Main Steam Isolation Valve	D-10		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	1
V2-80B	G-191167	1	A	Globe	18.00	O	C	C	FST-Q	n/a	FST-Q	
Main Steam Isolation Valve	G-12		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	1
V2-80C	G-191167	1	A	Globe	18.00	O	C	C	FST-Q	n/a	FST-Q	
Main Steam Isolation Valve	G-12		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	1
V2-80D	G-191167	1	A	Globe	18.00	O	C	C	FST-Q	n/a	FST-Q	
Main Steam Isolation Valve	H-12		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	1
V2-82A	G-191167	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
MSIV Actuator Nitrogen Supply Check Valve	B-1O		Active	Self					PSO-Q	ROJ-V03	PSO-RO	
									FE-Q	ROJ-V03	SC-RO	
V2-82B	G-191167	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
MSIV Actuator Nitrogen Supply Check Valve	B-1O		Active	Self					PSO-Q	ROJ-V03	PSO-RO	
									FE-Q	ROJ-V03	SC-RO	
V2-82C	G-191167	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
MSIV Actuator Nitrogen Supply Check Valve	B-1O		Active	Self					PSO-Q	ROJ-V03	PSO-RO	
									FE-Q	ROJ-V03	SC-RO	
V2-82D	G-191167	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
MSIV Actuator Nitrogen Supply Check Valve	B-1O		Active	Self					PSO-Q	ROJ-V03	PSO-RO	
									FE-Q	ROJ-V03	SC-RO	

System: NB Nuclear Boiler and Vessel Instrumentation

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V2-86A	G-191167	1	A	Globe	18.00	O	C	C	FST-Q	n/a	FST-Q	
Main Steam Isolation Valve	D-13		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	1
V2-86B	G-191167	1	A	Globe	18.00	O	C	C	FST-Q	n/a	FST-Q	
Main Steam Isolation Valve	G-12		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	1
V2-86C	G-191167	1	A	Globe	18.00	O	C	C	FST-Q	n/a	FST-Q	
Main Steam Isolation Valve	G-12		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	1
V2-86D	G-191167	1	A	Globe	18.00	O	C	C	FST-Q	n/a	FST-Q	
Main Steam Isolation Valve	H-12		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	1
V2-87A	G-191167	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
MSIV Actuator Air Supply Check Valve	B-13		Active	Self					PSO-Q	ROJ-V03	PSO-RO	
									FE-Q	ROJ-V03	SC-RO	
V2-87B	G-191167	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
MSIV Actuator Air Supply Check Valve	B-13		Active	Self					PSO-Q	ROJ-V03	PSO-RO	
									FE-Q	ROJ-V03	SC-RO	
V2-87C	G-191167	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
MSIV Actuator Air Supply Check Valve	B-13		Active	Self					PSO-Q	ROJ-V03	PSO-RO	
									FE-Q	ROJ-V03	SC-RO	
V2-87D	G-191167	2	A/C	Check	1.00	DE	C	n/a	LT-2Y	n/a	LT-RO	
MSIV Actuator Air Supply Check Valve	B-13		Active	Self					PSO-Q	ROJ-V03	PSO-RO	
									FE-Q	ROJ-V03	SC-RO	

System: NB Nuclear Boiler and Vessel Instrumentation

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V2-96A	G-191167	1	A/C	Check	16.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
Reactor Feedwater Line 'B'	H-3		Active	Self					FE-Q	ROJ-V01	SC-RO	
Check Valve									FE-Q	n/a	SO-Q	
V2-96B	G-191167	2	C	Check	16.00	DE	C	n/a	PSO-Q	n/a	PSO-Q	
Reactor Feedwater Line 'A'	F-3		Active	Self					FE-Q	ROJ-V01	SC-RO	
Third Check Valve												

System: NM Neutron Monitoring System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
BV-7-1	5920-271	2	A	Ball	0.375	C	C	C	FST-Q	n/a	FST-Q	
Neutron Monitoring System	C-7		Active	Solenoid					LJ	n/a	LJ-RO	
TIP Tube Ball Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
BV-7-2	5920-271	2	A	Ball	0.375	C	C	C	FST-Q	n/a	FST-Q	
Neutron Monitoring System	C-7		Active	Solenoid					LJ	n/a	LJ-RO	
TIP Tube Ball Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
BV-7-3	5920-271	2	A	Ball	0.375	C	C	C	FST-Q	n/a	FST-Q	
Neutron Monitoring System	C-7		Active	Solenoid					LJ	n/a	LJ-RO	
Tip Tube Ball Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
S-7-1	5920-271	2	D	Explosive	0.375	O	C	n/a	EX-10Y	n/a	EX-RO	
Neutron Monitoring System	C-7		Active	Explosive								
Tip Tube Shear Valve												
S-7-2	5920-271	2	D	Explosive	0.375	O	C	n/a	EX-10Y	n/a	EX-RO	
Neutron Monitoring System	C-7		Active	Explosive								
Tip Tube Shear Valve												
S-7-3	5920-271	2	D	Explosive	0.375	O	C	n/a	EX-10Y	n/a	EX-RO	
Neutron Monitoring System	C-7		Active	Explosive								
Tip Tube Shear Valve												
SOV-7-107	G-191175 Sh 2	3	A	Globe	1.00	O	C	C	FST-Q	n/a	FST-Q	
Neutron Monitoring System	C-10		Active	Solenoid					LJ	n/a	LJ-RO	
Tip Purge Isolation Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
V7-1	G-191175 Sh 2	2	A/C	Check	0.50	DE	C	n/a	LJ	n/a	LJ-RO	
Neutron Monitoring System	C-12		Active	Self					PSO-Q	ROJ-V07	PSO-RO	
Tip Purge Isolation. Check Valve									FE-Q	ROJ-V07	SC-RO	

System: PCAC Primary Containment & Atmosphere Control

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SB-16-19-10	G-191175 Sh 1	2	A	Butterfly	18.00	C	C	C	FST-Q	n/a	FST-Q	
PCAC Supp. Chamber	J-13		Active	Air					LJ	n/a	LJ-RO	
Purge Supply Cont.									PIT-2Y	n/a	PIT-2Y	
Isolation Valve									ST-Q	n/a	STC-Q	
SB-16-19-11A	G-191175 Sh 1	2	A/C	Butterfly	20.00	C	O/C	O	FST-Q	n/a	FST-Q	
PCAC Vacuum Relief From	K-15		Active	Air					LJ	n/a	LJ-RO	
Secondary Containment									PIT-2Y	n/a	PIT-2Y	
Isolation Valve									SP-RO	n/a	SP-Q	6
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
SB-16-19-11B	G-191175 Sh 1	2	A/C	Butterfly	20.00	C	O/C	O	FST-Q	n/a	FST-Q	
PCAC Vacuum Relief From	M-15		Active	Air					LJ	n/a	LJ-RO	
Secondary Containment									PIT-2Y	n/a	PIT-2Y	
Isolation Valve									SP-RO	n/a	SP-Q	6
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
SB-16-19-23	G-191175 Sh 1	2	A	Butterfly	6.00	C	C	C	FST-Q	n/a	FST-Q	
PCAC Containment Purge	H-15		Active	Air					LJ	n/a	LJ-RO	
Supply Containment									PIT-2Y	n/a	PIT-2Y	
Isolation Valve									ST-Q	n/a	STC-Q	
SB-16-19-6	G-191175 Sh 1	2	A	Butterfly	8.00	O	C	C	FST-Q	n/a	FST-Q	
PCAC to SBGT	D-1		Active	Air					LJ	n/a	LJ-RO	
Containment Isolation Valve									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SB-16-19-6A	G-191175 Sh 1	2	A	Butterfly	3.00	C	C	C	FST-Q	n/a	FST-Q	
PCAC Drywell Purge &	F-2		Active	Air					LJ	n/a	LJ-RO	
Vent Outlet Bypass Cont.									PIT-2Y	n/a	PIT-2Y	
Isolation Valve									ST-Q	n/a	STC-Q	

System: PCAC Primary Containment & Atmosphere Control

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SB-16-19-6B	G-191175 Sh 1	2	A	Butterfly	3.00	O	C	C	FST-Q	n/a	FST-Q	
PCAC Supp. Chamber Purge & Vent Line Bypass Inbd Cont. Isolation Valve	L-3		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SB-16-19-7	G-191175 Sh 1	2	A	Butterfly	18.00	C	C	C	FST-Q	n/a	FST-Q	
PCAC Purge & Vent Exhaust Containment Isolation Valve	D-1		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SB-16-19-7A	G-191175 Sh 1	2	A	Butterfly	18.00	C	C	C	FST-Q	n/a	FST-Q	
PCAC Drywell Purge & Vent Outlet Cont. Isolation Valve	E-2		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SB-16-19-7B	G-191175 Sh 1	2	A	Butterfly	18.00	C	C	C	FST-Q	n/a	FST-Q	
PCAC Supp. Chamber Purge & Vent Outlet Inbd Cont. Isolation Valve	K-3		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SB-16-19-8	G-191175 Sh 1	2	A	Butterfly	18.00	C	C	C	FST-Q	n/a	FST-Q	
PCAC Drywell Air Purge Inlet Containment Isolation Valve	I-12		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
SB-16-19-9	G-191175 Sh 1	2	A	Butterfly	18.00	C	C	C	FST-Q	n/a	FST-Q	
PCAC Air Purge Supply From Rx Bldg. Cont. Isolation Valve	I-16		Active	Air					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
V16-19-12A	G-191175 Sh 1	2	A/C	Vacuum Breaker	20.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
PCAC Torus Vacuum Relief From Secondary Containment Check Valve	K-16		Active	Self					FE-RO	n/a	SC-Q	
									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	

System: PCAC Primary Containment & Atmosphere Control

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V16-19-12B	G-191175 Sh 1	2	A/C	Vacuum Breaker	20.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
PCAC Torus Vacuum	M-16		Active	Self					FE-RO	n/a	SC-Q	
Relief From Secondary									FE-RO	n/a	SO-Q	
Containment Check Valve									SP-RO	n/a	SP-Q	
V16-19-13A	G-191175 Sh 1	2	A	Ball	1.50	L.C.	C	n/a	LJ	n/a	LJ-RO	
Drywell Air Lock	H-6		Passive	Manual								
Equalizing Vent, Outboard												
V16-19-13B	G-191175 Sh 1	2	A	Ball	1.50	L.C.	C	n/a	LJ	n/a	LJ-Perf.	
Drywell Air Lock	H-6		Passive	Manual								
Equalizing Vent, Inboard												
V16-19-5A	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression	J-8		Active	Self					PI-6M	n/a	PI-Q	
Chamber Downcomer									FE-RO	n/a	SC-Q	
Vacuum Breaker									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	
V16-19-5B	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression	J-8		Active	Self					PI-6M	n/a	PI-Q	
Chamber Downcomer									FE-RO	n/a	SC-Q	
Vacuum Breaker									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	
V16-19-5C	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression	J-8		Active	Self					PI-6M	n/a	PI-Q	
Chamber Downcomer									FE-RO	n/a	SC-Q	
Vacuum Breaker									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	

System: PCAC Primary Containment & Atmosphere Control

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V16-19-5D	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression	K-8		Active	Self					PI-6M	n/a	PI-Q	
Chamber Downcomer									FE-RO	n/a	SC-Q	
Vacuum Breaker									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	
V16-19-5E	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression	J-8		Active	Self					PI-6M	n/a	PI-Q	
Chamber Downcomer									FE-RO	n/a	SC-Q	
Vacuum Breaker									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	
V16-19-5F	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression	J-8		Active	Self					PI-6M	n/a	PI-Q	
Chamber Downcomer									FE-RO	n/a	SC-Q	
Vacuum Breaker									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	
V16-19-5G	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression	J-8		Active	Self					PI-6M	n/a	PI-Q	
Chamber Downcomer									FE-RO	n/a	SC-Q	
Vacuum Breaker									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	
V16-19-5H	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression	J-8		Active	Self					PI-6M	n/a	PI-Q	
Chamber Downcomer									FE-RO	n/a	SC-Q	
Vacuum Breaker									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	

System: PCAC Primary Containment & Atmosphere Control

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V16-19-5I	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression Chamber Downcomer Vacuum Breaker	K-8		Active	Self					PI-6M	n/a	PI-Q	
									FE-RO	n/a	SC-Q	
									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	
V16-19-5J	G-191175 Sh 1	2	A/C	Vacuum Breaker	18.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
Drywell To Suppression Chamber Downcomer Vacuum Breaker	J-8		Active	Self					PI-6M	n/a	PI-Q	
									FE-RO	n/a	SC-Q	
									FE-RO	n/a	SO-Q	
									SP-RO	n/a	SP-Q	
V16-20-20	G-191175 Sh 1	2	A	Globe	1.00	O	C	C	FST-Q	n/a	FST-Q	
PCAC Containment Purge Makeup Outbd Cont. Isolation Valve	H-12		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
V16-20-22A	G-191175 Sh 1	2	A	Globe	1.00	C	C	C	FST-Q	n/a	FST-Q	
PCAC Containment Purge Makeup Cont. Isolation Valve	H-11		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
V16-20-22B	G-191175 Sh 1	2	A	Globe	1.00	O	C	C	FST-Q	n/a	FST-Q	
PCAC Containment Purge Makeup Cont. Isolation Valve	H-12		Active	Solenoid					LJ	n/a	LJ-RO	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
VG-22A	VY-E-75-002	2	A	Globe	1.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
CAD To SBGT System Containment Isolation Valve	B-16		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: PCAC Containment Atmosphere Dilution System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
VG-22B	VY-E-75-002	2	A	Globe	1.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
CAD To SBGT System	E-16		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
Containment Isolation Valve									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: RBCCW Reactor Building Closed Cooling Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
RV-70-117A	G-191159 Sh 3	2	C	SRV	0.75	C	O/C	n/a	BD-10Y	n/a	BD-10Y	
RBCCW Drywell Piping Thermal Relief Valve	M-10		Active	Self					LA-10Y	n/a	LA-10Y	14
									LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-1A	G-191159 Sh 3	3	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SW Relief Valve	B-4		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-1B	G-191159 Sh 3	3	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SW Relief Valve	C-4		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-6A	G-191159 Sh 3	3	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SW Relief Valve	J-5		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-6B	G-191159 Sh 3	3	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SW Relief Valve	I-5		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
V70-106	G-191159 Sh 3	3	B	Gate	2.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
Rad Waste Building Inlet; (ACS; OP 2181)	P-2		Active	Manual								
V70-107	G-191159 Sh 3	3	B	Globe	2.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
Rad Waste Building Outlet; (ACS; OP 2181)	P-5		Active	Manual								

System: RBCCW Reactor Building Closed Cooling Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-113 Primary Containment RBCCW Supply Isolation Valve	G-191159 Sh 3 K-8	2	A/C Active	Check Self	8.00	DE	C	n/a	LJ PSO-Q FE-Q	n/a ROJ-V13 ROJ-V13	LJ-RO PSO-RO SC-RO	
V70-117 Primary Containment RBCCW Return Valve	G-191159 Sh 3 L-12	2	A Active	Gate Motor, AC	8.00	O	C	As-Is	LJ PIT-2Y ST-Q	n/a n/a CSJ-V01	LJ-Perf. PIT-2Y STC-CS	
V70-24A RBCCW cooling to CRD and B/D RHR Pumps; (ACS; OP 2181)	G-191159 Sh 3 N-2	3	B Active	Gate Manual	2.50	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-24B Alternate Cooling Supply to RBCCW; (ACS; OP 2181)	G-191159 Sh 1 C-12	3	B Active	Gate Manual	2.50	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-28 RBCCW cooling to CRD and RHR Pumps; (ACS; OP 2181)	G-191159 Sh 3 O-11	3	B Active	Gate Manual	3.00	C	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-28A RBCCW cooling to CRD and RHR Pumps; (ACS; OP 2181)	G-191159 Sh 3 O-10	3	B Active	Gate Manual	3.00	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-29A RBCCW Alternate Cooling Return to Cooling Tower; (ACS; OP 2181)	G-191159 Sh 2 D-2	3	B Active	Gate Manual	3.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-30A CRD Pump 1A Cooler Inlet; (ACS; OP 2181)	G-191159 Sh 3 L-4	3	B Active	Gate Manual	1.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-30B CRD Pump 1B Cooler Inlet; (ACS; OP 2181)	G-191159 Sh 3 M-4	3	B Active	Gate Manual	1.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11

System: RBCCW Reactor Building Closed Cooling Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-31A CRD Pump 1A Cooler Outlet; (ACS; OP 2181)	G-191159 Sh 3 M-4	3	B Active	Globe Manual	1.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-31B CRD Pump 1B Cooler Outlet; (ACS; OP 2181)	G-191159 Sh 3 N-4	3	B Active	Globe Manual	1.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-32A RBCCW cooling to Radwaste and A/C RHR Pumps; (ACS; OP 2181)	G-191159 Sh 3 P-2	3	B Active	Gate Manual	2.50	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-32B Alternate Cooling Supply to RBCCW; (ACS; OP 2181)	G-191159 Sh 1 C-12	3	B Active	Gate Manual	2.50	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11

System: RCIC Reactor Core Isolation Cooling System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
FCV-13-34	G-191174 Sh 1	NNS	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
RCIC Main Steam Drain to Condenser Valve	K-17		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
FCV-13-35	G-191174 Sh 1	NNS	B	Globe	1.00	O	O/C	C	FST-Q	n/a	FST-Q	
RCIC Main Steam Drain to Condenser Valve	L-17		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
LCV-13-12	G-191174 Sh 2	3	B	Gate	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
RCIC Baro Cond Condensate Pump Disch Drain LCV	L-10		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
LCV-13-13	G-191174 Sh 2	3	B	Gate	1.00	C	O/C	C	FST-Q	n/a	FST-Q	
RCIC Baro Cond Condensate Pump Disch Drain LCV	L-10		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
LCV-13-32	G-191174 Sh 1	2	B	Globe	0.75	C	O/C	C	FST-Q	n/a	FST-Q	
RCIC Steam Drain Trap Bypass Valve	H-17		Active	Air					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
PCV-13-23	G-191174 Sh 2	2	B	Globe	2.00	O	O	O	FE-Q	n/a	Skid-Q	
Cooling Water to Barometric Condenser	H-6		Active	Air								
RCIC-CONTROL	G-191174 Sh 2	2	B	Globe	2.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RCIC Turbine Governing Valve	D-12		Active	Hydraulic					FE-Q	n/a	Skid-Q	
S-13-3	G-191174 Sh 2	2	D	Rupture Disk	8.00	C	O/C	n/a	RD-5Y	n/a	RD-5Y	
RCIC Turbine Steam Exhaust Rupture Disc	E-11		Active	Self								

System: RCIC Reactor Core Isolation Cooling System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
S-13-4	G-191174 Sh 2	NNS	D	Rupture Disk	8.00	C	O/C	n/a	RD-5Y	n/a	RD-5Y	
RCIC Turbine Steam Exhaust Rupture Disc	E-9		Active	Self								
SL-13-55A	G-191174 Sh 1	2	A/C	Ex. Flow Check	0.75	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
RCIC Instrumentation Excess Flow Check Valve	B-8		Active	Self								
SL-13-55B	G-191174 Sh 1	2	A/C	Ex. Flow Check	0.75	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
RCIC Instrumentation Excess Flow Check Valve	C-8		Active	Self								
SL-13-55C	G-191174 Sh 1	2	A/C	Ex. Flow Check	0.75	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
RCIC Instrumentation Excess Flow Check Valve	B-8		Active	Self								
SL-13-55D	G-191174 Sh 1	2	A/C	Ex. Flow Check	0.75	O	O/C	n/a	FE-Q	RR-V02	LEF-10Y*	
RCIC Instrumentation Excess Flow Check Valve	C-8		Active	Self								
SR-13-25	G-191174 Sh 2	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RCIC Pump Suction Relief Valve	C-7		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-13-26	G-191174 Sh 2	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RCIC Pump Discharge Line to Barometric Cond Relief Valve	I-7		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-13-27	G-191174 Sh 2	3	C	SRV	1.50	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RCIC Barometric Condenser Relief Valve	J-14		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SSC-13-10	G-191174 Sh 1	2	C	Stop Check	2.00	C	O/C	n/a	FE-Q	ROJ-V24	SC-RO	
RCIC Barometric Cond Vacuum Pump Disch Stop Check Valve	K-9		Active	Self					FE-Q	n/a	SO-Q	

System: RCIC Reactor Core Isolation Cooling System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V13-1	G-191174 Sh 2	2	B	Globe	2.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RCIC Turbine Trip & Throttle Valve	D-14		Active	Motor, DC					FE-Q	n/a	Skid-Q	
V13-131	G-191174 Sh 2	2	B	Globe	3.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RCIC Steam Supply Valve	E-15		Active	Motor, DC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V13-132	G-191174 Sh 2	2	B	Globe	2.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RCIC Pump Discharge Valve to Barometric Condenser	G-6		Active	Motor, DC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V13-133	G-191174 Sh 2	2	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	Skid-Q	
RCIC Barometric Cond Condensate Pump Disch Check Valve	K-10		Active	Self								
V13-15	G-191174 Sh 1	1	A	Gate	3.00	O	O/C	As-Is	LJ	n/a	LJ-Perf.	
RCIC Steam Supply Inboard Containment Isolation Valve	E-7		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V13-16	G-191174 Sh 1	1	A	Gate	3.00	O	O/C	As-Is	LJ	n/a	LJ-Perf.	
RCIC Steam Supply Outboard Containment Isolation Valve	E-9		Active	Motor, DC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V13-18	G-191174 Sh 1	2	B	Gate	6.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Condensate Supply to RCIC Pump Suction Valve	E-14		Active	Motor, DC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V13-19	G-191174 Sh 1	2	C	Check	6.00	DE	O/C	n/a	FE-Q	RR-V01	SC-OC	
Condensate Supply to RCIC Pump Suction Check Valve	E-14		Active	Self					FE-Q	n/a	SO-Q	
V13-20	G-191174 Sh 1	2	B	Gate	4.00	O	O	As-Is	PIT-2Y	n/a	PIT-2Y	
RCIC Pump Discharge Isolation Valve	G-10		Active	Motor, DC					ST-Q	n/a	STO-Q	

System: RCIC Reactor Core Isolation Cooling System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V13-20B	G-191174 Sh 1	2	C	Check	1.00	DE	C	n/a	PSO-Q	n/a	PSO-RO	
Pressurizing Valve Keep Fill System	G-11		Active	Self					FE-Q	RR-V01	SC-OC	
V13-21	G-191174 Sh 1	2	B	Gate	4.00	C	O	As-Is	PIT-2Y	n/a	PIT-2Y	
RCIC Injection Isolation Valve	G-9		Active	Motor, DC					ST-Q	n/a	STO-Q	
V13-22	G-191174 Sh 1	2	C	Swing Check	4.00	DE	O/C	n/a	FE-Q	CSJ-V05	SC-CS	
RCIC Injection Check Valve	G-9		Active	Self					FE-Q	CSJ-V05	SO-CS	
V13-27	G-191174 Sh 1	2	B	Globe	2.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RCIC Pump Discharge Minimum Flow Valve	I-11		Active	Motor, DC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V13-29	G-191174 Sh 1	2	C	Check	2.00	DE	O/C	n/a	FE-Q	ROJ-25	D&E-RO	
RCIC Pump Discharge Minimum Flow Check Valve	J-10		Active	Self					PSO-Q	n/a	PSO-Q	
V13-30	G-191174 Sh 1	2	B	Globe	4.00	C	C	As-Is	PIT-2Y	n/a	PIT-2Y	
RCIC Pump Discharge Return to Condensate Storage Tank	E-10		Active	Motor, DC					ST-Q	n/a	STC-Q	
V13-38	G-191174 Sh 1	2	C	Check	2.00	DE	O	n/a	FE-Q	ROJ-V24	SC-RO	
RCIC Vacuum Pump Discharge Check Valve	K-11		Active	Self					FE-Q	n/a	SO-Q	
V13-39	G-191174 Sh 1	2	B	Gate	6.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Supp Pool Supply to RCIC Pump Suct Inbd Isolation Valve	F-13		Active	Motor, DC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V13-40	G-191174 Sh 1	2	C	Check	6.00	DE	O	n/a	FE-Q	ROJ-25	D&E-RO	
Suppression Pool Supply to RCIC Pump Suction Check Valve.	N-11		Active	Self								

System: RCIC Reactor Core Isolation Cooling System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V13-41	G-191174 Sh 1	2	B	Gate	6.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Supp Pool Supply to RCIC Pump Suct Inbd Isolation Valve	N-10		Active	Motor, DC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V13-6	G-191174 Sh 1	2	A/C	Check	8.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
RCIC Exhaust Line Inboard Nozzle Check	K-8		Active	Self					FE-Q	ROJ-V15	SC-RO	
									FE-Q	n/a	SO-Q	
V13-7	G-191174 Sh 1	2	A/C	Check	8.00	DE	O/C	n/a	LJ	n/a	LJ-RO	
RCIC Exhaust Line Outboard Nozzle Check	K-8		Active	Self					FE-Q	ROJ-V15	SC-RO	
									FE-Q	n/a	SO-Q	
V13-70	G-191174 Sh 2	3	C	Check	1.25	DE	O	n/a	FE-Q	n/a	Skid-Q	
RCIC Baro Cond Condensate Pump Disch Check Valve	K-13		Active	Self								
V13-820	G-191174 Sh 1	2	A/C	Check	2.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
RCIC Turbine Exhaust Vacuum Breaker	K-6		Active	Self					FE-Q	ROJ-V18	SC-RO	
									FE-Q	ROJ-V18	SO-RO	
V13-821	G-191174 Sh 1	2	A/C	Check	2.00	DE	O/C	n/a	LT-2Y	n/a	LT-RO	
RCIC Turbine Exhaust Vacuum Breaker	J-6		Active	Self					FE-Q	ROJ-V18	SC-RO	
									FE-Q	ROJ-V18	SO-RO	

System: RDW Radwaste Systems

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
RV-20-82A	G-191177 Sh 1	2	C	SRV	0.75	C	O/C	n/a	BD-10Y	n/a	BD-10Y	
Pen. X-18 Thermal Relief Valve	A-3		Active	Self					LA-10Y	n/a	LA-10Y	14
									LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
RV-20-94A	G-191177 Sh 1	2	C	SRV	0.75	C	O/C	n/a	BD-10Y	n/a	BD-10Y	
Pen. X-19 Thermal Relief Valve	F-3		Active	Self					LA-10Y	n/a	LA-10Y	14
									LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
V20-82	G-191177 Sh 1	2	A	Ball	3.00	O	C	C	FST-Q	n/a	FST-Q	
Drywell Floor Drain Sump Containment Isolation Valve	B-4		Active	Air					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
V20-83	G-191177 Sh 1	2	A	Ball	3.00	O	C	C	FST-Q	n/a	FST-Q	
Drywell Floor Drain Sump Containment Isolation Valve	B-5		Active	Air					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
V20-94	G-191177 Sh 1	2	A	Ball	3.00	O	C	C	FST-Q	n/a	FST-Q	
Drywell Equipment Drain Sump Containment Isolation Valve	G-4		Active	Air					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
V20-95	G-191177 Sh 1	2	A	Ball	3.00	O	C	C	FST-Q	n/a	FST-Q	
Drywell Equipment Drain Sump Containment Isolation Valve	G-5		Active	Air					LJ	n/a	LJ-Perf.	
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	

System: RHR Residual Heat Removal System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
FCV-10-160	G-191172	2	B	Globe	0.75	C	C	C	FST-Q	n/a	FST-Q	
RHR Return Line Process	F-15		Active	Air					PIT-2Y	n/a	PIT-2Y	
Sampling Valve									ST-Q	n/a	STC-Q	
SR-10-35A	G-191172	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Pump Discharge	D-2		Active	Self					LL-10Y	n/a	LL-10Y	
Relief Valve									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-10-35B	G-191172	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Pump Discharge	D-15		Active	Self					LL-10Y	n/a	LL-10Y	
Relief Valve									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-10-40	G-191172	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Shutdown Cooling	G-8		Active	Self					LL-10Y	n/a	LL-10Y	
Suction Line Relief Valve									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-10-72A	G-191172	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Relief Valve	L-7		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-10-72B	G-191172	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Relief Valve	L-11		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-10-72C	G-191172	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Relief Valve	J-7		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	

System: RHR Residual Heat Removal System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SR-10-72D	G-191172	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Relief Valve	J-10		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-10-86A	G-191172	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Heat Exchanger Shell (RHR) Side Relief Valve	L-3		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-10-86B	G-191172	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Heat Exchanger Shell (RHR) Side Relief Valve	L-14		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
V10-13A	G-191172	2	B	Gate	20.00	O/KL	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Suppression Pool RHR Pump Suction Valve	L-8		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-13B	G-191172	2	B	Gate	20.00	O/KL	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Suppression Pool RHR Pump Suction Valve	L-9		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-13C	G-191172	2	B	Gate	20.00	O/KL	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Suppression Pool RHR Pump Suction Valve	J-8		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-13D	G-191172	2	B	Gate	20.00	O/KL	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Suppression Pool RHR Pump Suction Valve	J-9		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-15A	G-191172	2	B	Gate	20.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Recirculation Loop Supply Valve to RHR Pump Suction	K-7		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: RHR Residual Heat Removal System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V10-15B	G-191172	2	B	Gate	20 00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Recirculation Loop Supply	K-10		Active	Motor, AC					ST-Q	n/a	STC-Q	
Valve to RHR Pump Suction									ST-Q	n/a	STO-Q	
V10-15C	G-191172	2	B	Gate	20.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Recirculation Loop Supply	J-7		Active	Motor, AC					ST-Q	n/a	STC-Q	
Valve to RHR Pump Suction									ST-Q	n/a	STO-Q	
V10-15D	G-191172	2	B	Gate	20.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
Recirculation Loop Supply	J-10		Active	Motor, AC					ST-Q	n/a	STC-Q	
Valve to RHR Pump Suction									ST-Q	n/a	STO-Q	
V10-16A	G-191172	2	B	Gate	4.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR Pump Discharge Mini	I-5		Active	Motor, AC					ST-Q	n/a	STC-Q	
Flow Return to Suppression Pool									ST-Q	n/a	STO-Q	
V10-16B	G-191172	2	B	Gate	4.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR Pump Discharge Mini	I-12		Active	Motor, AC					ST-Q	n/a	STC-Q	
Flow Return to Suppression Pool									ST-Q	n/a	STO-Q	
V10-17	G-191172	1	A	Gate	20.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
Recirc Supply to RHR	G-8		Active	Motor, DC					LT-2Y	n/a	LT-2Y	
Pump Suct. Outbd. Isolation									PIT-2Y	n/a	PIT-2Y	
Valve									ST-Q	CSJ-V04	STC-CS	
									ST-Q	CSJ-V04	STO-CS	
V10-17A1	G-191172	2	B	Globe	0.50	C	O/C	n/a	S O/C-OC	n/a	S O/C-OC	
V10-17 Bonnet Vent Valve	G-8		Active	Manual								
V10-18	G-191172	1	A	Gate	20.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
Recirc Supply to RHR	F-8		Active	Motor, AC					LT-2Y	n/a	LT-2Y	
Pump Suction Inbd									PIT-2Y	n/a	PIT-2Y	
Isolation Valve									ST-Q	CSJ-V04	STC-CS	
									ST-Q	CSJ-V04	STO-CS	

System: RHR Residual Heat Removal System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V10-183	G-191172	2	B	Gate	10.00	C	C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHRSW to RHR Emergency Fill Isolation Valve	J-2		Passive	Motor, AC								
V10-184	G-191172	2	B	Gate	10.00	C	C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHRSW to RHR Emergency Fill Isolation Valve	J-2		Passive	Motor, AC								
V10-18A	G-191172	2	A/C	Check	0.50	DE	O/C	n/a	LJ	n/a	LJ-RO	
Penetration X-12 Thermal Relief Valve	F-8		Active	Self					LT-2Y	n/a	LT-RO	10
									FE-Q	ROJ-V17	SC-RO	
									FE-Q	ROJ-V17	SO-RO	
V10-18A5	G-191172	2	A/C	Check	0.375	DE	O/C	n/a	LT-2Y	n/a	LT-RO	10
V10-18 Bonnet Relief Valve	F-9		Active	Self					FE-Q	ROJ-V17	SC-RO	
									FE-Q	ROJ-V17	SO-RO	
V10-19A	G-191172	2	C	Check	3.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
RHR Minimum Flow Check Valve	L-5		Active	Self					FE-Q	n/a	SO-Q	
									FE-Q	ROJ-V20	SO-RO	
V10-19B	G-191172	2	C	Check	3.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
RHR Minimum Flow Check Valve	L-12		Active	Self					FE-Q	n/a	SO-Q	
									FE-Q	ROJ-V20	SO-RO	
V10-19C	G-191172	2	C	Check	3.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
RHR Minimum Flow Check Valve	J-5		Active	Self					FE-Q	n/a	SO-Q	
									FE-Q	ROJ-V20	SO-RO	
V10-19D	G-191172	2	C	Check	3.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
RHR Minimum Flow Check Valve	J-12		Active	Self					FE-Q	n/a	SO-Q	
									FE-Q	ROJ-V20	SO-RO	
V10-20	G-191172	2	B	Gate	20.00	C	C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR Loop Cross-Connect Valve	H-5		Passive	Motor, AC								

System: RHR Residual Heat Removal System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V10-21B	G-191172	2	B	Gate	4.00	C	C	n/a	S O/C-OC	n/a	S O/C-OC	
RHR Pump B Discharge Flush	L-13		Active	Manual								
V10-21D	G-191172	2	B	Gate	4.00	C	C	n/a	S O/C-OC	n/a	S O/C-OC	
RHR Pump D Discharge Flush	K-13		Active	Manual								
V10-25A	G-191172	1	B	Gate	24.00	O	O	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR to Recirc Loop Isolation Valve	E-6		Active	Motor, AC					ST-Q	n/a	STO-Q	
V10-25B	G-191172	1	B	Gate	24.00	O	O	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR to Recirc Loop Isolation Valve	E-12		Active	Motor, AC					ST-Q	n/a	STO-Q	
V10-26A	G-191172	2	A	Gate	12.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
RHR To Containment Spray Isolation Valve	C-7		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-26B	G-191172	2	A	Gate	12.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
RHR To Containment Spray Isolation Valve	C-10		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-27A	G-191172	1	A	Globe	24.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
RHR to Recirc Loop Isolation Valve	D-6		Active	Motor, AC					LT-2Y	n/a	LT-2Y	10
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-27B	G-191172	1	A	Globe	24.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
RHR to Recirc Loop Isolation Valve	D-12		Active	Motor, AC					LT-2Y	n/a	LT-2Y	10
									PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: RHR Residual Heat Removal System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V10-31A	G-191172	2	A	Gate	12.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
RHR To Containment Spray Isolation Valve	C-8		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-31B	G-191172	2	A	Gate	12.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
RHR To Containment Spray Isolation Valve	C-10		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-34A	G-191172	2	B	Globe	10.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR Suppression Pool Cooling Supply Valve	E-3		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-34B	G-191172	2	B	Globe	10.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR Suppression Pool Cooling Supply Valve	E-14		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-36A	G-191172	2	C	Check	1.00	DE	C	n/a	PSO-Q	RR-V01	PSO-OC	
RHR Pump Discharge Pressurizing Line Check Valve	J-3		Active	Self					FE-Q	RR-V01	SC-OC	
V10-36B	G-191172	2	C	Check	1.00	DE	C	n/a	PSO-Q	RR-V01	PSO-OC	
RHR Pump Discharge Pressurizing Line Check Valve	J-14		Active	Self					FE-Q	RR-V01	SC-OC	
V10-38A	G-191172	2	A	Globe	4.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
Suppression Chamber RHR Spray Ring Supply Valve	E-4		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	

System: RHR Residual Heat Removal System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V10-38B	G-191172	2	A	Globe	4.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
Suppression Chamber RHR	F-13		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
Spray Ring Supply Valve									ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-39A	G-191172	2	A	Gate	12.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
RHR Cont.	D-4		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
Spray/Suppression Pool									ST-Q	n/a	STC-Q	
Cooling Supply Valve									ST-Q	n/a	STO-Q	
V10-39B	G-191172	2	A	Gate	12.00	C	O/C	As-Is	LJ	n/a	LJ-Perf.	
RHR Cont.	D-13		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
Spray/Suppression Pool									ST-Q	n/a	STC-Q	
Cooling Supply Valve									ST-Q	n/a	STO-Q	
V10-46A	G-191172	1	A/C	Check	24.00	DE	O/C	n/a	LT-2Y	n/a	LT-2Y	10
RHR to Recirc Injection	E-7		Active	Self					FE-Q	CSJ-V06	SC-CS	
Check Valve									FE-Q	CSJ-V06	SO-CS	
V10-46B	G-191172	1	A/C	Check	24.00	DE	O/C	n/a	LT-2Y	n/a	LT-2Y	10
RHR to Recirc Injection	E-10		Active	Self					FE-Q	CSJ-V06	SC-CS	
Check Valve									FE-Q	CSJ-V06	SO-CS	
V10-48A	G-191172	2	C	Check	16.00	DE	O/C	n/a	FE-Q	CSJ-V07	PSO-Q	
RHR Pump Discharge	L-5		Active	Self					FE-Q	n/a	SC-Q	
Check Valve									FE-Q	CSJ-V07	SO-CS	
V10-48B	G-191172	2	C	Check	16.00	DE	O/C	n/a	FE-Q	CSJ-V07	PSO-Q	
RHR Pump Discharge	L-13		Active	Self					FE-Q	n/a	SC-Q	
Check Valve									FE-Q	CSJ-V07	SO-CS	
V10-48C	G-191172	2	C	Check	16.00	DE	O/C	n/a	FE-Q	CSJ-V07	PSO-Q	
RHR Pump Discharge	J-5		Active	Self					FE-Q	n/a	SC-Q	
Check Valve									FE-Q	CSJ-V07	SO-CS	

System: RHR Residual Heat Removal System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V10-48D	G-191172	2	C	Check	16.00	DE	O/C	n/a	FE-Q	CSJ-V07	PSO-Q	
RHR Pump Discharge	J-13		Active	Self					FE-Q	n/a	SC-Q	
Check Valve									FE-Q	CSJ-V07	SO-CS	
V10-57	G-191172	2	B	Gate	4.00	C	C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR Loop Cross-Connect	H-13		Active	Motor, DC					ST-Q	n/a	STC-Q	
To Radwaste Isolation Valve												
V10-65A	G-191172	2	B	Globe	20.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR HX Bypass Valve	J-3		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-65B	G-191172	2	B	Globe	20.00	O	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR HX Bypass Valve	K-15		Active	Motor, AC					ST-Q	n/a	STC-Q	
									ST-Q	n/a	STO-Q	
V10-66	G-191172	2	B	Gate	4.00	C	C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR Loop Cross-Connect	H-13		Active	Motor, AC					ST-Q	n/a	STC-Q	
To Radwaste Isolation Valve												
V10-81A	G-191172	2	B	Gate	24.00	L.O.	O	n/a	PIT-2Y	n/a	PIT-2Y	
RHR to Recirc Loop	E-7		Passive	Manual								
Injection Valve												
V10-81B	G-191172	2	B	Gate	24.00	L.O.	O	n/a	PIT-2Y	n/a	PIT-2Y	
RHR to Recirc Loop	E-10		Passive	Manual								
Injection Valve												

System: RWCU Reactor Water Clean Up System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V12-15	G-191178 Sh 1	1	A	Gate	4.00	O	C	As-Is	LJ	n/a	LJ-Perf.	
Reactor Water Cleanup	D-2		Active	Motor, AC					PIT-2Y	n/a	PIT-2Y	
Containment Isolation Valve									ST-Q	ROJ-V23	STC-RO	
V12-18	G-191178 Sh 1	1	A	Gate	4.00	O	C	As-Is	LJ	n/a	LJ-Perf.	
Reactor Water Cleanup	D-3		Active	Motor, DC					PIT-2Y	n/a	PIT-2Y	
Containment Isolation Valve									ST-Q	ROJ-V23	STC-RO	
V12-28A	G-191178 Sh 1	3	C	Check	3.00	DE	C	n/a	PSO-Q	ROJ-V21	PSO-RO	
RWCU Pump Discharge	D-8		Active	Self					FE-Q	ROJ-V21	SC-RO	
Check Valve												
V12-28B	G-191178 Sh 1	3	C	Check	3.00	DE	C	n/a	PSO-Q	ROJ-V21	PSO-RO	
RWCU Pump Discharge	G-8		Active	Self					FE-Q	ROJ-V21	SC-RO	
Check Valve												
V12-62	G-191178 Sh 1	2	C	Check	4.00	DE	C	n/a	FE-Q	ROJ-25	D&E-RO	
RWCU Flow to Feedwater	B-5		Active	Self					PSO-Q	n/a	PSO-RO	
System Isolation Check Valve												
V12-62A	G-191178 Sh 1	3	C	Check	4.00	DE	C	n/a	FE-Q	ROJ-25	D&E-RO	
RWCU Flow to Feedwater	B-5		Active	Self					PSO-Q	n/a	PSO-RO	
System Isolation Check Valve												

System: SLC Standby Liquid Control System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
S-11-14A	G-191171	2	D	Explosive	1.50	C	O	n/a	EX-10Y	n/a	EX-2Y	3
SLC Injection (Squib) Valve	G-3		Active	Explosive								
S-11-14B	G-191171	2	D	Explosive	1.50	C	O	n/a	EX-10Y	n/a	EX-2Y	3
SLC Injection (Squib) Valve	H-3		Active	Explosive								
SR-11-39A	G-191171	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SLC Discharge Relief Valve	G-8		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-OC	
									VE-10Y	n/a	VE-10Y	
SR-11-39B	G-191171	2	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SLC Discharge Relief Valve	K-8		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-OC	
									VE-10Y	n/a	VE-10Y	
V11-16	G-191171	1	C	Check	1.50	DE	O/C	n/a	FE-Q	ROJ-V06	SC-RO	
SLC Injection Piping Check Valve	H-3		Active	Self					FE-Q	ROJ-V06	SO-RO	
V11-17	G-191171	1	C	Check	1.50	DE	O/C	n/a	FE-Q	ROJ-V06	SC-RO	
SLC Injection Piping Check Valve	I-2		Active	Self					FE-Q	ROJ-V06	SO-RO	
V11-18	G-191171	1	B	Gate	1.50	L.O.	O	n/a	PIT-2Y	n/a	PIT-2Y	
SLC Injection Valve	I-2		Passive	Manual								
V11-43A	G-191171	2	C	Check	1.50	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SLC Pump Discharge Check Valve	H-7		Active	Self					FE-Q	n/a	SO-Q	
V11-43B	G-191171	2	C	Check	1.50	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SLC Pump Discharge Check Valve	J-7		Active	Self					FE-Q	n/a	SO-Q	

System: RHRSW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
PCV-104-69A	G-191159 Sh 1	3	B	Globe	8.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11
RHRSW PCV for SW to A-EDG and RRUs 5, 7; (ACS; OP 2181)	J-13		Active	Manual								
PCV-104-69B	G-191159 Sh 1	3	B	Globe	8.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11
RHR PCV for SW to B-EDG AND RRUs 6, 8; (ACS; OP 2181)	B-13		Active	Manual								
SR-10-80A	G-191172	2	C	SRV	4.00 X 6.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Heat Exchanger Tube (RHRSW) Side Relief Valve	L-3		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-10-80B	G-191172	2	C	SRV	4.00 X 6.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHR Heat Exchanger Tube (RHRSW) Side Relief Valve	L-14		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
V10-89A	G-191172	3	B	Globe	12.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR HX 'A' Service Water Outlet Valve; (ACS; OP 2181)	M-1		Active	Motor, AC					ST-Q	n/a	STC-Q	11
									ST-Q	n/a	STO-Q	
V10-89B	G-191172	3	B	Globe	12.00	C	O/C	As-Is	PIT-2Y	n/a	PIT-2Y	
RHR HX 'B' Service Water Outlet Valve; (ACS; OP 2181)	M-17		Active	Motor, AC					ST-Q	n/a	STC-Q	11
									ST-Q	n/a	STO-Q	
V70-36A	G-191159 Sh 1	3	B	Gate	3.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11
Alternate Cooling Supply to RBCCW; (ACS; OP 2181)	C-13		Active	Manual								
V70-36B	G-191159 Sh 1	3	B	Gate	3.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11
Alternate Cooling Supply to RBCCW; (ACS; OP 2181)	C-13		Active	Manual								

System: RHRSW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-38A	G-191159 Sh 1	3	C	Check	12.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
RHRSW Pump Discharge Check Valve	K-12		Active	Self					FE-Q	n/a	SO-Q	
V70-38B	G-191159 Sh 1	3	C	Check	12.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
RHRSW Pump Discharge Check Valve	B-12		Active	Self					FE-Q	n/a	SO-Q	
V70-40A	G-191159 Sh 1	3	C	Check	12.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
RHRSW Pump Discharge Check Valve	K-12		Active	Self					FE-Q	n/a	SO-Q	
V70-40B	G-191159 Sh 1	3	C	Check	12.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
RHRSW Pump Discharge Check Valve	A-12		Active	Self					FE-Q	n/a	SO-Q	
V70-42A	G-191159 Sh 1	3	B	Gate	8.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11
RHRSW Alternate Cooling to SW Supply; (ACS; OP 2181)	K-13		Active	Manual								
V70-42B	G-191159 Sh 1	3	B	Gate	8.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11
RHRSW Alternate Cooling to SW Supply; (ACS; OP 2181)	B-13		Active	Manual								
V70-43A	G-191159 Sh 1	3	C	Check	8.00	DE	O/C	n/a	FE-Q	ROJ-25	D&E-RO	
SW Discharge Loop Header Check Valve	J-11		Active	Self					PSO-Q	n/a	PSO-Q	
V70-43B	G-191159 Sh 1	3	C	Check	8.00	DE	O/C	n/a	FE-Q	ROJ-25	D&E-RO	
SW Discharge Loop Header Check Valve	B-12		Active	Self					PSO-Q	n/a	PSO-Q	

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
FCV-104-17A	G-191159 Sh 1	3	B	Gate	4.00	C	C	C	FST-Q	n/a	FST-Q	
SW Supply to Screen Wash Flow Control Valve	D-4		Active	Hydraulic					ST-Q	n/a	STC-Q	11
FCV-104-17B	G-191159 Sh 1	3	B	Gate	4.00	C	C	C	FST-Q	n/a	FST-Q	
SW Supply to Screen Wash Flow Control Valve	E-4		Active	Hydraulic					ST-Q	n/a	STC-Q	11
FCV-104-17C	G-191159 Sh 1	3	B	Gate	4.00	C	C	C	FST-Q	n/a	FST-Q	
SW Supply to Screen Wash Flow Control Valve	F-4		Active	Hydraulic					ST-Q	n/a	STC-Q	11
FCV-104-17D	G-191159 Sh 1	3	B	Gate	3.00	C	C	C	FST-Q	n/a	FST-Q	
SW Supply to Screen Wash Flow Control Valve	F-4		Active	Hydraulic					ST-Q	n/a	STC-Q	11
FCV-104-17E	G-191159 Sh 1	3	B	Gate	3.00	C	C	C	FST-Q	n/a	FST-Q	
SW Supply to Screen Wash Flow Control Valve	G-4		Active	Hydraulic					ST-Q	n/a	STC-Q	11
FCV-104-28A	G-191159 Sh 2	3	B	Globe	8.00	C	O	O	FE-Q	n/a	Skid-Q	11
Diesel Generator A Cooling Water Inlet; (ACS; OP 2181)	I-5		Active	Air								
FCV-104-28B	G-191159 Sh 2	3	B	Globe	8.00	C	O	O	FE-Q	n/a	Skid-Q	11
Diesel Generator B Cooling Water Inlet; (ACS; OP 2181)	D-5		Active	Air								
PCV-104-73A	G-191159 Sh 2	3	B	Globe	8.00	O	O	O	FE-Q	n/a	Skid-Q	
Diesel Generator A Service Water Pump Discharge	J-4		Active	Hydraulic								
PCV-104-73B	G-191159 Sh 2	3	B	Globe	8.00	O	O	O	FE-Q	n/a	Skid-Q	
Diesel Generator B Service Water Pump Discharge	B-4		Active	Hydraulic								

System: SW Fuel Pool Cooling & Cleanup System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
RV70-260A	G-191173 Sh 2	3	C	SRV	0.75 X	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Service Water Relief Valve; SFPC Heat Exchanger Shell Side	D-8		Active	Self	1.00				LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
RV70-260B	G-191173 Sh 2	3	C	SRV	0.75 X	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Service Water Relief Valve; SFPC Heat Exchanger Shell Side	F-8		Active	Self	1.00				LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SB-70-1	G-191159 Sh 2	NNS	B	Butterfly	24.00	DE	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW To Main Condenser Discharge Block Valve; (ACS; OP 2181)	D-9		Active	Manual								
SE-70-4A	G-191159 Sh 1	3	B	Gate	1.00	C	O	O	FST-Q	n/a	FST-Q	
RHRSW Pump Motor Cooling Coil Supply Valve	K-10		Active	Solenoid					ST-Q	n/a	STO-Q	
SE-70-4B	G-191159 Sh 1	3	B	Gate	1.00	C	O	O	FST-Q	n/a	FST-Q	
RHRSW Pump Motor Cooling Coil Supply Valve	K-10		Active	Solenoid					ST-Q	n/a	STO-Q	
SE-70-4C	G-191159 Sh 1	3	B	Gate	1.00	C	O	O	FST-Q	n/a	FST-Q	
RHRSW Pump Motor Cooling Coil Supply Valve	K-10		Active	Solenoid					ST-Q	n/a	STO-Q	
SE-70-4D	G-191159 Sh 1	3	B	Gate	1.00	C	O	O	FST-Q	n/a	FST-Q	
RHRSW Pump Motor Cooling Coil Supply Valve	K-10		Active	Solenoid					ST-Q	n/a	STO-Q	
SP-70-3A	G-191159 Sh 1	3	B	Ball	2.00	C	C	C	FST-Q	n/a	FST-Q	
A Service Water Strainer Backwash Valve	H-5		Active	Air					ST-Q	n/a	STC-Q	11
SP-70-3B	G-191159 Sh 1	3	B	Ball	2.00	C	C	C	FST-Q	n/a	FST-Q	
B Service Water Strainer Backwash Valve	C-5		Active	Air					ST-Q	n/a	STC-Q	11

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SR-70-13A	G-191159 Sh 1	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHRSW Pump Motor Cooling Relief Valve	L-9		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-13B	G-191159 Sh 1	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHRSW Pump Motor Cooling Relief Valve	L-9		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-13C	G-191159 Sh 1	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHRSW Pump Motor Cooling Relief Valve	L-9		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-13D	G-191159 Sh 1	3	C	SRV	0.75	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
RHRSW Pump Motor Cooling Relief Valve	L-9		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-14A	G-191159 Sh 1	3	C	SRV	0.75	C	O	n/a	LA-10Y	n/a	LA-10Y	
RHRSW Pump Gland Cooling Relief Valve	L-9		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-14B	G-191159 Sh 1	3	C	SRV	0.75	C	O	n/a	LA-10Y	n/a	LA-10Y	
RHRSW Pump Gland Cooling Relief Valve	L-9		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
SR-70-14C	G-191159 Sh 1	3	C	SRV	0.75	C	O	n/a	LA-10Y	n/a	LA-10Y	
RHRSW Pump Gland Cooling Relief Valve	L-9		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
SR-70-14D	G-191159 Sh 1	3	C	SRV	0.75	C	O	n/a	LA-10Y	n/a	LA-10Y	
RHRSW Pump Gland Cooling Relief Valve	L-9		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
SR-70-16A	G-191159 Sh 2	3	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Diesel Generator Jacket Water Cooler Safety Relief Valve	I-6		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-16B	G-191159 Sh 2	3	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
Diesel Generator Jacket Water Cooler Safety Relief Valve	C-5		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-2A	G-191159 Sh 1	3	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SW Relief Valve	I-8		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
SR-70-2B	G-191159 Sh 1	3	C	SRV	1.00	C	O/C	n/a	LA-10Y	n/a	LA-10Y	14
SW Relief Valve	C-8		Active	Self					LL-10Y	n/a	LL-10Y	
									SP-10Y	n/a	SP-10Y	
									VE-10Y	n/a	VE-10Y	
V70-101	G-191159 Sh 1	3	B	Gate	12.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW Supply to RBCCW Heat Exchanger A; (ACS; OP 2181)	J-8		Active	Manual								
V70-11	G-191159 Sh 2	3	B	Gate	14.00	DE	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW Discharge to Cooling Tower Basin Isolation Valve; (ACS; OP 2181)	D-7		Active	Manual								
V70-130A	G-191159 Sh 1	3	B	Gate	3.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
CW Pump Cooling SW Supply; (ACS; OP 2181)	C-5		Active	Manual								

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-130B CW Pump Cooling SW Supply; (ACS; OP 2181)	G-191159 Sh 1 I-5	3	B Active	Gate Manual	3.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-13A SW Supply to the A Header Isolation; (ACS; OP 2181)	G-191159 Sh 1 J-7	3	B Active	Gate Manual	24.00	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-13B SW Supply to the B Header Isolation; (ACS; OP 2181)	G-191159 Sh 1 B-7	3	B Active	Gate Manual	24.00	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-15A SW Supply to the A RBCCW Heat Exchanger; (ACS; OP 2181)	G-191159 Sh 1 J-8	3	B Active	Gate Manual	12.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-15B SW Supply to the B RBCCW Heat Exchanger; (ACS; OP 2181)	G-191159 Sh 1 B-8	3	B Active	Gate Manual	12.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-16A Alt. Clng Deep Basin to RHRSW Pump Suct. Isolation. Valve; (ACS; OP 2181)	G-191159 Sh 2 D-7	3	B Active	Gate Manual	24.00	C	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-16B Alternate Cooling to SW Supply; (ACS; OP 2181)	G-191159 Sh 1 C-9	3	B Active	Gate Manual	24.00	C	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-17 Alternate Cooling to SW Supply; (ACS; OP 2181)	G-191159 Sh 2 D-6	3	B Active	Gate Manual	20.00	DE	O	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-17A #1 West Clng Tower SW Distribution Tray Valve; (ACS; OP 2181)	G-191159 Sh 2 D-7	3	B Passive	Globe Manual	6.00	Th	O	n/a	S O/C-OC	n/a	S O/C-OC	11

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-17B #1 West Clng Tower SW Distribution Tray Valve; (ACS; OP 2181)	G-191159 Sh 2 D-7	3	B Passive	Globe Manual	6.00	Th	O	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-17C #1 West Clng Tower SW Distribution Tray Valve; (ACS; OP 2181)	G-191159 Sh 2 D-7	3	B Passive	Globe Manual	6.00	Th	O	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-17D #1 West Clng Tower SW Distribution Tray Valve, (ACS; OP 2181)	G-191159 Sh 2 D-7	3	B Passive	Globe Manual	6.00	Th	O	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-18 SW Discharge Header Isolation Valve; (ACS; OP 2181)	G-191159 Sh 2 E-7	3	B Active	Gate Manual	20.00	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-184 Alt Cooling Water Line Vent; (ACS; OP 2181)	G-191159 Sh 1 C-9	3	B Active	Gate Manual	1.00	C	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-19A SW Supply Header Cross-Connect Valve; (ACS; OP 2181)	G-191159 Sh 1 H-9	3	B Active	Gate Motor, AC	24.00	O	O/C	As-Is	PIT-2Y ST-Q ST-Q	n/a n/a n/a	PIT-2Y STC-Q STO-Q	11
V70-19B SW Supply Header Cross-Connect Valve; (ACS; OP 2181)	G-191159 Sh 1 C-9	3	B Active	Gate Motor, AC	24.00	O	O/C	As-Is	PIT-2Y ST-Q ST-Q	n/a n/a n/a	PIT-2Y STC-Q STO-Q	11
V70-1A Service Water Pump Discharge Check Valve; (ACS; OP 2181)	G-191159 Sh 1 C-2	3	C Active	Check Self	14.00	DE	O/C	n/a	FE-Q FE-Q FE-Q	ROJ-V09 ROJ-V09 ROJ-V09	PSO-Q SC-RO SO-RO	

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-1B	G-191159 Sh 1	3	C	Check	14.00	DE	O/C	n/a	FE-Q	ROJ-V09	PSO-Q	
Service Water Pump Discharge Check Valve; (ACS; OP 2181)	B-2		Active	Self					FE-Q	ROJ-V09	SC-RO	
									FE-Q	ROJ-V09	SO-RO	
V70-1C	G-191159 Sh 1	3	C	Check	14.00	DE	O/C	n/a	FE-Q	ROJ-V09	PSO-Q	
Service Water Pump Discharge Check Valve; (ACS; OP 2181)	K-2		Active	Self					FE-Q	ROJ-V09	SC-RO	
									FE-Q	ROJ-V09	SO-RO	
V70-1D	G-191159 Sh 1	3	C	Check	14.00	DE	O/C	n/a	FE-Q	ROJ-V09	PSO-Q	
Service Water Pump Discharge Check Valve; (ACS; OP 2181)	J-2		Active	Self					FE-Q	ROJ-V09	SC-RO	
									FE-Q	ROJ-V09	SO-RO	
V70-20	G-191159 Sh 1	3	B	Gate	20.00	O	C	As-Is	PIT-2Y	n/a	PIT-2Y	
SW Supply Valve to Turbine Building Cooling Loads; (ACS; OP 2181)	H-11		Active	Motor, AC					ST-Q	n/a	STC-Q	11
V70-203	G-191159 Sh 2	3	B	Gate	1.25	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW Supply to RRU-9 Isolation Valve; (ACS; OP 2181)	B-3		Active	Manual								
V70-206	G-191159 Sh 2	3	B	Gate	2.50	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW to RRUs 17A and 17B, Isolation Valve; (ACS; OP 2181)	J-3		Active	Manual								
V70-216	G-191159 Sh 2	3	B	Ball	4.00	L.C.	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
ACS Isolation to SFPC E-19-2A & E-19-2B	K-3		Active	Manual								
V70-22C	G-191159 Sh 1	3	B	Globe	4.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
Service Water Discharge From MG 'A' Oil Cooler; (ACS; OP 2181)	F-13		Active	Manual								

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-22D	G-191159 Sh 1	3	B	Globe	4.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
Service Water Discharge From MG 'B' Oil Cooler; (ACS; OP 2181)	F-14		Active	Manual								
V70-23C	G-191159 Sh 1	3	B	Gate	6.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
Refuel Floor Air Cond. Return; (ACS; OP 2181)	E-11		Active	Manual								
V70-244A	G-191173 Sh 2	3	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SW System Vacuum Breaker Check Valve	B-10		Active	Self					FE-Q	n/a	SO-Q	
V70-244B	G-191173 Sh 2	3	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SW System Vacuum Breaker Check Valve	B-10		Active	Self					FE-Q	n/a	SO-Q	
V70-252B	G-191159 Sh 2	3	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SW System Vacuum Breaker Check Valve	G-5		Active	Self					FE-Q	n/a	SO-Q	
V70-252C	G-191159 Sh 2	3	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SW System Vacuum Breaker Check Valve	G-5		Active	Self					FE-Q	n/a	SO-Q	
V70-257A	G-191173 Sh 2	3	B	Globe	4.00	C	O	As-Is	PIT-2Y	n/a	PIT-2Y	
SFPC Hx Service Water Outlet Throttling/Isolation Valve	C-10		Active	Motor, AC					ST-Q ST-Q	n/a n/a	STC-Q STO-Q	
V70-257B	G-191173 Sh 2	3	B	Globe	4.00	C	O	As-Is	PIT-2Y	n/a	PIT-2Y	
SFPC Hx Service Water Outlet Throttling/Isolation Valve	F-10		Active	Motor, AC					ST-Q ST-Q	n/a n/a	STC-Q STO-Q	
V70-27	G-191159 Sh 1	3	B	Globe	1.50	L.O.	C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW to Fire Water Pressurizing Line; (ACS; OP 2181)	D-2		Active	Manual								

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-281A	G-191159 Sh 1	3	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SW System Vacuum Breaker Check Valve	J-9		Active	Self					FE-Q	n/a	SO-Q	
V70-281B	G-191159 Sh 1	3	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SW System Vacuum Breaker Check Valve	B-9		Active	Self					FE-Q	n/a	SO-Q	
V70-281C	G-191159 Sh 1	3	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SW System Vacuum Breaker Check Valve	J-9		Active	Self					FE-Q	n/a	SO-Q	
V70-281D	G-191159 Sh 1	3	C	Check	2.00	DE	O/C	n/a	FE-Q	n/a	SC-Q	
SW System Vacuum Breaker Check Valve	B-9		Active	Self					FE-Q	n/a	SO-Q	
V70-29	G-191159 Sh 2	3	B	Gate	3.00	C	O	n/a	S O/C-OC	n/a	S O/C-OC	11
RBCCW Alternate Cooling SW Return to Cooling Tower; (ACS; OP 2181)	E-2		Active	Manual								
V70-2A	G-191159 Sh 1	3	B	Gate	14.00	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW Pump Discharge Isolation Valve; (ACS; OP 2181)	C-3		Active	Manual								
V70-2B	G-191159 Sh 1	3	B	Gate	14.00	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW Pump Discharge Isolation Valve; (ACS; OP 2181)	B-3		Active	Manual								
V70-2C	G-191159 Sh 1	3	B	Gate	14.00	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW Pump Discharge Isolation Valve; (ACS; OP 2181)	J-3		Active	Manual								
V70-2D	G-191159 Sh 1	3	B	Gate	14.00	O	O/C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW Pump Discharge Isolation Valve; (ACS; OP 2181)	J-3		Active	Manual								

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-302 RRU-10, 11, 12, 14, 15, 16 Outlet; (ACS; OP 2181)	G-191159 Sh 1 E-10	3	B Active	Gate Manual	6.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-306E RRU-13 Outlet; (ACS; OP 2181)	G-191159 Sh 1 E-10	3	B Active	Gate Manual	1.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-413 SW to Rad Monitor from SW Main Condenser Disch. Line; (ACS; OP 2181)	G-191159 Sh 2 D-8	NNS	B Active	Gate Manual	0.75	DE	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-414 SW to Rad Monitor from SW Discharge to Deep Basin; (ACS; OP 2181)	G-191159 Sh 2 D-8	NNS	B Active	Gate Manual	0.75	DE	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-511B SW System Vacuum Breaker Check Valve	G-191159 Sh 1 H-12	3	C Active	Check Self	2.00	DE	O/C	n/a	FE-Q FE-Q	n/a n/a	SC-Q SO-Q	
V70-511C SW System Vacuum Breaker Check Valve	G-191159 Sh 1 H-12	3	C Active	Check Self	2.00	DE	O/C	n/a	FE-Q FE-Q	n/a n/a	SC-Q SO-Q	
V70-6 SW Screen Wash Alternate Cooling/Isolation Valve; (ACS; OP 2181)	G-191159 Sh 1 F-3	3	B Active	Gate Manual	8.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-90 SW Supply to RBCCW HX B; (ACS; OP 2181)	G-191159 Sh 1 B-8	3	B Active	Gate Manual	12.00	O	C	n/a	S O/C-OC	n/a	S O/C-OC	11
V70-92A SW Discharge From 'A' RBCCW Heat Exchanger; (ACS; OP 2181)	G-191159 Sh 1 G-8	3	B Active	Globe Manual	8.00	L.O.	C	n/a	S O/C-OC	n/a	S O/C-OC	11

System: SW Service Water System

Valve Number / Description	Flow Diagram / Coord.	Safety Class	OM Cat Act / Pass.	Valve Type/ Actuator	Size (inch)	Norm Pos	Safety Pos	Fail Pos	Code Require.	CSJ/ROJ RR	Program Commit.	Notes
V70-92B	G-191159 Sh 1	3	B	Globe	8.00	L.O.	C	n/a	S O/C-OC	n/a	S O/C-OC	11
SW Discharge From 'B' RBCCW Heat Exchanger, (ACS; OP 2181)	E-8		Active	Manual								

TABLE 21

IST INSTRUMENT LIST[1]

Instrument ID	Description	Location	Range	Increments	Accuracy Controls
SERVICE WATER PUMPS (P-7-1A-D) OP 4181					
LI-104-9	Level - SW Pump Inlet Pressure Calc	CRP 9-6	210-235'	1 ft	Calc. VYC-1797
ERFIS PTID F060	SW Supply Temperature	ERFIS	-	-	-
VY-6311	SW/FW Pump Test Loop Flow Meter	Local-SW Intake Structure	1000-5000 gpm	1 gpm	Calc. VYC-1797
M&TE	C-Test P-7-1A Discharge Pressure	Local-SW Intake Structure	0-150 or 200 psi	.25 psi	Calc. VYC-1797
M&TE	C-Test P-7-1B Discharge Pressure	Local-SW Intake Structure	0-150 or 200 psi	.25 psi	Calc. VYC-1797
M&TE	C-Test P-7-1C Discharge Pressure	Local-SW Intake Structure	0-150 or 200 psi	.25 psi	Calc. VYC-1797
M&TE	C-Test P-7-1D Discharge Pressure	Local-SW Intake Structure	0-150 or 200 psi	.25 psi	Calc. VYC-1797
PI-104-7A	P-7-1A Discharge Pressure	Local-SW Intake Structure	0-160 psi	2 psi	Note (2)
PI-104-7B	P-7-1B Discharge Pressure	Local-SW Intake Structure	0-160 psi	2 psi	Note (2)
PI-104-7C	P-7-1C Discharge Pressure	Local-SW Intake Structure	0-160 psi	2 psi	Note (2)
PI-104-7D	P-7-1D Discharge Pressure	Local-SW Intake Structure	0-160 psi	2 psi	Note (2)
RHRSW PUMPS (P-8-1A-D) OP 4124					
Deleted					
Deleted					
FI-10-132A	RHRSW Pump A & C Flow (Digital)	CRP 9-3	0-5000 gpm	.5 gpm	Calc. VYC-722B
M&TE	P-8-1A Differential Pressure	Local @ Inlet & Discharge	0 - 500 psi	.01 psi	DP 0301
M&TE	P-8-1C Differential Pressure	Local @ Inlet & Discharge	0 - 500 psi	.01 psi	DP 0301
FI-10-132B	RHRSW Pump B & D Flow (Digital)	CRP 9-3	0-5000 gpm	.5 gpm	Calc. VYC-722B
M&TE	P-8-1B Differential Pressure	Local @ Inlet & Discharge	0 - 500 psi	.01 psi	DP 0301
M&TE	P-8-1D Differential Pressure	Local @ Inlet & Discharge	0 - 500 psi	.01 psi	DP 0301
Deleted					
Deleted					
RHR PUMPS (P-10-1A-D) OP 4124					
M&TE	P-10-1A Inlet Pressure	RB, 213' NE RK 25-59	0 - 15 psi	.05 psi	Calc. VYC-1743
M&TE	P-10-1A Discharge Pressure	RB, 213' NE RK 25-59	0 - 400 psi	1 psi	Calc. VYC-1743
FI-10-139A(B)	RHR Pump Flow (Digital)	CRP 9-3	0-20000 gpm	1 gpm	Calc VYC-0479
M&TE	P-10-1B Inlet Pressure	RB, 213' SE RK 25-62	0 - 15 psi	.05 psi	Calc VYC-1743
M&TE	P-10-1B Discharge Pressure	RB, 213' SE RK 25-62	0 - 400 psi	1 psi	Calc. VYC-1743
M&TE	P-10-1C Inlet Pressure	RB, 213' NE RK 25-59	0 - 15 psi	.05 psi	Calc. VYC-1743
M&TE	P-10-1C Discharge Pressure	RB, 213' NE RK 25-59	0 - 400 psi	1 psi	Calc. VYC-1743
M&TE	P-10-1D Inlet Pressure	RB, 213' SE RK 25-62	0 - 15 psi	.05 psi	Calc. VYC-1743
M&TE	P-10-1D Discharge Pressure	RB, 213" SE RK 25-62	0 - 400 psi	1 psi	Calc. VYC-1743
STANDBY FUEL POOL PUMPS (P-19-2A-2B) OP 4179					
PI-19-84A	P-19-2A Inlet Pressure	RB, 303' RK 10AA	30"-0-30 psi	1 psi	Calc. VYC-2003
PI-19-83A	P-19-2A Discharge Pressure	RB, 303' RK 10AA	0-160 psi	2 psi	Calc. VYC-2003
PI-19-84B	P-19-2B Inlet Pressure	RB, 303' RK 10AB	30"-0-30 psi	1 psi	Calc. VYC-2003
PI-19-83B	P-19-2B Discharge Pressure	RB, 303' RK 10AB	0-160 psi	2 psi	Calc. VYC-2003
FI-19-73	P-19-2A & B Pump Flow	RB, 303' RK 10AA	0-1400 gpm	50 gpm	Calc. VYC-2003
HPCI PUMP (P-44-1) OP 4120					
M&TE	P-44-1 Inlet Pressure	RB, 213' RK 25-50B SW	30"-0-30 psi	.2 psi	Calc. VYC-1758
M&TE	P-44-1 Discharge Pressure	RB, 213' RK 25-50B SW	0-1500 psi	5 psi	Calc. VYC-1758
M&TE	P-44-1 Speed (RPM)	Hand Held	-	-	PO 96-14500-34: 2 rpm @ 10000

TABLE 21

IST INSTRUMENT LIST[1]

Instrument ID	Description	Location	Range	Increments	Accuracy Controls
FI-23-108-1	P-44-1 Pump Flow	CRP 9-3	0-5000 gpm	100 gpm	Calc. VYC-704
SLC PUMPS (P-45-1A & B) OP 4114					
PI-11-53	P-45-1A & B Disch. Press.	RB, 318' NW RK 25-19	0-1500 psi	25 psi	Calc. VYC-1966
FI-11-1	P-45-1A & B Pump Flow	RB, 318'	5-50 gpm	1 gpm	Calc. VYC-1965
CORE SPRAY PUMPS (P-46-1A & B) OP 4123					
M&TE	P-46-1A Inlet Pressure	RB, 213' NE RK 25-1	0 - 15 psi	.05 psi	Calc. VYC-1758
M&TE	P-46-1A Discharge Pressure	RB, 213' NE RK 25-1	0 - 400 psi	1 psi	Calc. VYC-1758
FI-14-50A	P-46-1A Pump Flow (Digital)	CRP 9-3	0-5000 gpm	.5 gpm	Calc. VYC-717B
M&TE	P-46-1B Inlet Pressure	RB, 213' SE RK 25-60	0 - 15 psi	.05 psi	Calc. VYC-1758
M&TE	P-46-1B Discharge Pressure	RB, 213' SE RK 25-60	0 - 400 psi	1 psi	Calc. VYC-1758
FI-14-50B	P-46-1B Pump Flow (Digital)	CRP 9-3	0-5000 gpm	.5 gpm	Calc. VYC-717B
RCIC PUMP (P-47-1A) OP 4121					
M&TE	P-47-1A Inlet Pressure	RB, 213'9" RK 25-58B NW	30"-0-30 psi	.2 psi	Calc. VYC-1758
M&TE	P-47-1A Discharge Pressure	RB, 213'9" RK 25-58B NW	0-1500 psi	5 psi	Calc. VYC-1758
M&TE	P-47-1A Speed (RPM)	Hand Held	-	-	PO 96-14500-34: 2 rpm @ 10000
FI-13-91-1	P-47-1A Pump Flow	CRP 9-4	0-500 gpm	10 gpm	Calc. VYC-709
FUEL OIL TRANSFER PUMPS (P-92-1A & B) OP 4195					
PI-108-5A	P-92-1A Discharge Pressure	Local-DG "A"	0-30 psi	0.2 psi	Calc. VYC-685H
LI-108-12A	P-92-1A Pump Flow	Local-DG "A"	0-100"	1"	Calc. VYC-685F
PI-108-5B	P-92-1B Discharge Pressure	Local-DG "B"	0-30 psi	0.2 psi	Calc. VYC-685H
LI-108-12B	P-92-1B Pump Flow	Local-DG "B"	0-100"	1"	Calc. VYC-685F
CONTROL RM CHILLED WATER (SP-1) OP 4195					
M&TE	SP-1 Pump Flow	Ultrasonic Clamp-On	-	-	PO 96-14235-00 1.3% over calibrated range
M&TE	SP-1 Differential Pressure	Local @ Inlet & Discharge	0-500 psi	.01 psi	DP 0301
Deleted					

NOTES

(1) Substitution of IST instruments is permitted only with approval from the PISTC. It is important to use the same instruments to ensure repeatable test results and consistency in trending.

(2) Accuracy control per I&C Calibration Database. Instrument is used for information only.

IST PUMP REFERENCE DATA SET (RDS)
No.

Pump Number:	WO No.:	
System:	Surv. Procedure:	Date Est:_____/_____/

Evaluation

Background:

Report of Test Results:

Parameter	____/____/ Previous RDS value	New RDS value	Deviation

Analysis of Data:

Design Requirements:

Conclusion:

References:

IST PUMP REFERENCE DATA SET (RDS)
No.

Pump Number:	System:	Date Est:____/____/

Hydraulic Criteria

Parameter	Reference Value	Instrument Number	Acceptable Range	Low Alert Range	High Alert Range	Req. Action Range
Speed (rpm) (1)						
ΔP (psid) (2)						
Suct. Press. (psig) (3)						
Disc. Press. (psig) (4)						
Flow Rate (gpm) (5)						

(1) HPCI & RCIC only (2) All pumps except SLC & FOT (3) As Applicable (4) SLC & FOT pumps (5) All pumps

Vibration Criteria

Vibration Location Point No.	Ref. Value (in/sec.)	Acceptable Range	Alert Range	Required Action Range
		≤	to	>
		≤	to	>
		≤	to	>
		≤	to	>
		≤	to	>
		≤	to	>
		≤	to	>
		≤	to	>
		≤	to	>

Spectrum Analysis required by Relief Request commitment: Yes ☐ RR No._____ No ☐

Attachments

Surveillance Form(s) ☐ Performance Graph ☐

Administration

Reviewed by:_____ _____ ____/____/
System Engineer (Print Name) Signature Date

Reviewed by:_____ _____ ____/____/
(Vibration Only) Predictive Maintenance Coordinator (Print Name) Signature Date

Approved by:_____ _____ ____/____/
IST Coordinator (Print Name) Signature Date

☐ Copy of VYPPF 7013.01 and 10CFR50.59 review forwarded to responsible department for surveillance procedure incorporation.

IST VALVE REFERENCE DATA SET (RDS)
No.

Valve Number: System:	WO No. Surv. Procedure:	Date Established ____/____/____

Background:

Parameter	____/____/____ Previous RDS value	New RDS value	Deviation
Open Stroke Time (STO)			
Closed Stroke Time (STC)			
Mechanical Exerciser (SO) Torque or Force			

Analysis of Data:

Design Requirements:

Conclusion:

References:

IST VALVE REFERENCE DATA SET (RDS)
No.

Valve Number:	System:	Date Est: ____/____/____

Acceptance Criteria

Parameter	Reference Value	Acceptable Range	Low Required Action Range	High Required Action Range	Design Maximum Actuation Time
Open Stroke Time		to			
Closed Stroke Time		to			
Mech. Exerciser Torque or Force		to			

Remarks:

Attachments

Surveillance Form(s) ☐	Performance Graph ☐

Administration

Reviewed by:_____ _____ ____/____/____
System Engineer (Print Name) Signature Date

Approved by:_____ _____ ____/____/____
IST Coordinator (Print Name) Signature Date

☐ Copy of VYPPF 7013.02 and supporting 10CFR50.59 review forwarded to responsible department for surveillance procedure incorporation.

REVIEW OF IST INSTRUMENTATION FOUND OUT OF CALIBRATION

Part I - Evaluation of Instrument Error

1. Instrument MPAC ID:_____ Mfg._____ Date____/____/

2. Date of previous calibration:____/____/

3. Found out of calibration at last calibration (Y) (N)

4. Review of instrument usage since previous calibration.

% Cal Error (4.a)	% Loop Cal Error (4.b)	% Total Error (4.c)	% Total Error Acceptable? (4.d)	
			YES	NO

4.a Calculate % calibration error as follows:

1) Calculate maximum as-found instrument output deviation from required output value.

2) Calculate the range over which the calibration is performed (i.e., CALmax - CALmin).

3) Divide the maximum output deviation by the calibration range.

4) Multiply by 100%.

4.b If an instrument loop is involved, and a loop calibration was not performed, then calculate the instrument loop calibration error as follows:

1) Calculate instrument loop component % calibration per Step 4.a above.

2) Calculate loop % error by taking the square root of the sum of the individually squared component % calibration errors.

4.c Calculate the instrument % total error by adding the % calibration error calculated in Step 4.a and 4.b.

4.d If the % total error for the instrument of concern is less than or equal to the % required accuracy shown in the applicable Operations surveillance procedure that used the instrument, then note this in the Comment section below, and state that no adjustment of the test value is necessary.

4.e If the % total error for instrument of concern exceeded the required accuracy identified in the applicable Operations surveillance procedure, then complete Part 2.

Part II - Evaluation of Instrument Error

1. Enter test data from surveillance(s) performed when instrument calibration was suspect:

Test Procedure		Test Value
No.	Date	

2. Calculate the adjusted test value (as a range of values):

   a. Multiply the total error calculated in Step 4.c times the instrument indication range.

   b. Calculate the adjusted test value range equal to the test value of concern ± the value calculated in Step 4.c.

3. If the adjusted test value range falls outside the acceptable range established for the IST parameter of concern, then go to Step 5 below.

4. If any Revised Test Value Range is unacceptable, initiate an Event Report per AP 0009.

   ER submitted? (Y) (N) Date:___/___/

5. If the instrument was also found out of calibration during previous calibration, initiate an ER per AP 0009.

   ER submitted? (Y) (N) Date:___/___/

6. Comments/Recommendations:

Performed by OEA:_____/_____
Date

Reviewed by PISTC:_____/_____
Date

IST SURVEILLANCE RETURN TO NORMAL TEST FREQUENCY

Component Number: System: Surv. Procedure:	Date:____/____/ Event Report:
Evaluation	
Design Requirements:	
Conclusion:	
References:	

Attachments

Surveillance Form(s) ☐ (optional)	Performance Graph ☐ (optional)	VYAPF 4000.01 ☐ (required to change frequency)

Administration

Prepared by:_____ ____/____/
System Engineer (Print Name) Signature Date

Reviewed by:_____ ____/____/
IST Coordinator (Print Name) Signature Date